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THE FEDERAL ADVISORY COMMITTEE ON EDUCATION

Ray Lyman Wilbur, secretary of the Department of the Interior, has organized an advisory committee on education made up of about forty persons. He has asked this committee to prepare a comprehensive plan for the guidance of the federal government in all its activities directly related to education. If the committee reaches the conclusion that new legislation is necessary, its report is to describe the statutes which it believes Congress should enact. The scope of activity proposed for the committee by Secretary Wilbur is broad, and the opportunity for a contribution of the highest importance to American education is open to the committee.

Secretary Wilbur's own views were expressed in general terms in an address which he delivered before the American Council on Education on May 3. The most significant sections of this address are as follows:

The place of the national government is not that of supplying funds in large amounts for carrying on the administrative functions of education in the communities but to develop methods, ideals, and procedures and to present them to be taken on their merits. The national government, too, can give widespread information on procedures, can report on what is actually going on in different parts of the country and in the world, and can unify to some extent the objects of those in the field of education in so far as unification is desirable. There is a

distinct place for this sort of thing in the administrative side of the national government, but it should not be recognized as an administrative position with large funds at its disposal. A department of education similar to the other departments of the government is not required. An adequate position for education within a department and with sufficient financial support for its research, survey, and other work is all that is needed.

Great gains are possible in our whole educational scheme through national leadership provided in this way. Education is preparation for the future, and there must be constant change to keep in step with the advances made. Our conceptions regarding the mental makeup of children are shifting, and the requirements of life are changing, with a civilization which is being revamped by the practical applications of science and invention. The object of those of us who seek the greatest possible advantages for all from education can, it seems to me, be accomplished without disturbing the initiative and responsibility of local and state units of government.

An account of the first meeting of the Federal Advisory Committee on Education was published in the *United States Daily* as follows:

Plans for a study of the present relations of the national government to education to aid enactment of remedial legislation were discussed June 7 by the Advisory Committee on Education, comprising representatives of national educational organizations who met at the call of the secretary of the Interior, Ray Lyman Wilbur.

In convening the conference, Secretary Wilbur outlined its scope and purpose. He announced that Charles R. Mann, director of the American Council on Education, was appointed general chairman of the advisory committee and that J. W. Crabtree, of the National Education Association, was appointed general secretary. For the chairmanships of the three subcommittees, Secretary Wilbur appointed James E. Russell for the committee to consider the educational activities of the United States government, Lotus D. Coffman for the committee to consider subsidies of the federal government to colleges, and Frank Cody for the committee to study other subsidies now granted.

Dr. Mann, in formally opening the discussions, outlined the present scope of government participation in education. He said that the task confronting the conference is "very difficult" because the whole question of organization of education in the federal government "is pretty well loaded with dynamite, as anyone knows who has lived here and observed operations for any length of time."

The advisory committee adjourned without setting a date for another general meeting after receiving reports from the three subcommittees indicating that they would be unable to formulate definite plans before next fall.

The chairmen of the subcommittees said they proposed to designate indi-

vidual members to secure data to guide the groups in their further deliberations. By vote of the conference, such a plan was agreed to, with the future procedure to be settled by a conference committee headed by General Chairman Mann and composed of three members of each subcommittee.

Chairman Mann said that Secretary Wilbur did not expect an early report but preferred to have the advisory committee work out its plans in detail with unanimity of opinion even if it takes a year. All these factors, he said, should be left to the conference committee to decide.

The conference adjourned, and the conference committee convened immediately to consider its preliminary plans.

When the meeting was called to order, the secretary of the Interior, Ray Lyman Wilbur, made an address of welcome. Charles R. Mann, director of the American Council on Education, who presided, made an introductory statement of the problems to be studied. The United States commissioner of education, William John Cooper, called attention to a list of official documents presented on various phases of education.

The conference considered federal subsidies to education at college level, a paper on which was presented by Dr. Arthur J. Klein, chief of the Division of Higher Education of the United States Bureau of Education, and subsidies to education of less than college level. A paper on the latter subject was presented by Dr. J. C. Wright, director of the Federal Board for Vocational Education.

Dr. Wright discussed in particular the crystallizing of public sentiment which resulted in the enactment of the Smith-Hughes Act for vocational education of less than college grade and traced the growth of vocational education since the law went into effect. The amount of state and local money for vocational education, he said, has been increasing much more rapidly than federal funds.

The conference later divided into three groups to study various phases of education.

Group No. 1 will consider educational activities of the United States government. This group consists of James E. Russell, chairman, S. P. Capen, W. M. Davidson, Frank P. Graves, J. C. Merriam, W. F. Willoughby, W. S. Thayer, Lois H. Meek, Lita Bane, George D. Strayer, Belle Sherwin, Walter L. Crocker, George Johnson, and Mrs. F. P. Bagley.

This committee will give consideration in its studies to the following suggested issues.

"On the basis of the present educational activities of the federal government and of their present administration, what are the next steps toward better organization for the future?

"State the principle of local autonomy or decentralized responsibility.

"What types of federal activity strengthen local autonomy and responsibility? What types weaken them?

"What organization of federal educational activities best insures limitation of federal activities to types that strengthen local autonomy?

"What reorganization of present federal activities in education best insures their effective co-ordination?"

Group No. 2 will consider the subsidies of the federal government to colleges, their administration, results obtained, and future policies. This group consists of Lotus D. Coffman, chairman, James R. Angell, Harry W. Chase, George H. Denny, Edward C. Elliott, Uel W. Lamkin, Cloyd H. Marvin, W. P. Morgan, Rt. Rev. Edward A. Pace, D. W. Springer, Mary E. Woolley, George F. Zook, Lida Lee Tall, and E. P. Cubberley.

The list of suggested issues for this group to study is as follows:

"On the basis of present federal subsidies to colleges, of present administration, and of results obtained, what are the best policies for the future?

"What is the procedure in paying these subsidies to colleges, disbursing them by colleges, and auditing accounts?

"What is the procedure in selecting candidates for subsidized positions, employing them, and supervising their activities?

"What constitutes an official appointment authorizing payment of federal money for salaries?

"Recognizing the value of federal support in starting new enterprises, what are the present conditions that justify continuation of federal subsidies?

"When federal subsidies were established, federal taxation was indirect. What is the justification for continuing and extending these now that two-thirds of federal taxes are direct income taxes?

"What is the justification of federal support of state engineering experiment stations?

"What evidence shows whether federal subsidies are or are not weakening local responsibility?"

Group No. 3 will consider subsidies granted for education of less than college grade, how administered, results obtained, and suggestions of future policy. This committee group consists of Frank Cody, chairman, J. B. Edmonson, Charles H. Judd, Mrs. S. M. N. Marrs, A. B. Meredith, Carl H. Milam, W. B. Munroe, W. F. Russell, Guy E. Snavely, William Green, T. E. Finegan, Mrs. L. W. Hughes, Mrs. Edith B. Joynes, Agnes M. Samuelson, R. L. Cooley, and Maurice Bisgyer.

The list of suggested issues for this group to study is as follows:

"On the basis of present federal subsidies to education of less than college grade, of present administration, and of results obtained, what are the best policies for the future?

"What is the procedure in paying these subsidies and auditing accounts?

"What is the procedure in selecting candidates for subsidized positions, employing them, and supervising their activities?

"What constitutes an official appointment authorizing payment of federal money for salaries?

"Recognizing the value of federal support in starting new enterprises, what are the present conditions that justify continuation of federal subsidies?

"When federal subsidies were established, federal taxation was indirect. What is the justification for continuing and extending these now that two-thirds of federal taxes are direct income taxes?

"What evidence shows whether federal subsidies are or are not weakening local responsibility?

"On the basis of present federal subsidies, what are the advantages and the disadvantages of gradually reducing and ultimately withdrawing federal subsidies to a state as the state appropriations for the specified purpose increase?"

In addressing the meeting, Secretary Wilbur said:

"The problems before you are more or less familiar to you all. They are fundamental—particularly fundamental to this country. Education has a unique significance in this republic. It has had a great history. The question is: What shall its future history be in so far as the national government is concerned? There has been since the very beginning here in the United States marked local development of the public-school system, but we have had certain things develop in the national capital and in different parts of the country. In the Department of the Interior, through the so-called 'Bureau of Education,' there has been an attempt made to get a certain leadership in American education.

"I think that, while the history of that department is somewhat checkered, on the whole, it has done many good pieces of work and has provided sound leadership. But those of us who have studied it lately have felt that there is a great deal more that can be done. We have endeavored to increase the responsibility of the office by elevating somewhat the commissioner of education and by making room for an assistant commissioner of education. We are trying to find a suitable woman for assistant commissioner of education. It does not seem to be easy. Perhaps if we had left out the word 'suitable,' we would have had no difficulty. No doubt, after I have mentioned it here, there will be a good many candidates. We want a first-class woman, for women, as you know, play a very important part in American education.

"Aside from the activities of the Bureau, certain responsibilities have been accepted in the government for types of education of vocational character and otherwise. We feel that a very careful study should be made since there is a tendency at the present time in this country to bring to Washington all the various problems of the various parts of the country. If the Mediterranean fly makes trouble in Florida, there must be a resolution with appropriation passed by Congress. If an act of God takes place in Oklahoma and takes the form of a flood, Congress is expected to give relief. In other words, Congress is being looked upon as a sort of glorified Red Cross agency in many parts of the country.

"There should be a limit to things of that kind—particularly in the field of education.

"I want to express my appreciation of the fine spirit and interest which

you all have shown. I doubt whether there is any other field in the United States where one could send out, as we did, a considerable number of invitations and not have a single declination. Some felt they could not come to the first conference but expressed a desire to serve on the group.

"If this committee can continue in the spirit in which it has begun, I feel that a historic document will finally be presented by Chairman Mann, to whom I now turn over the meetings."

PROPAGANDA IN THE SCHOOLS

The report of Superintendent E. C. Broome's committee on propaganda in the schools which was presented at the Atlanta meeting of the National Education Association is one of those documents which contains nothing but truth but to which no one is likely to turn for guidance in a real situation. The report says that nothing should be used in the schools which is not suitable for school use. The report does not sanction wholesale exclusion of materials dealing with social problems or wholesale inclusion of such materials. It does take a positive stand on one question. It deplores the overuse of prizes for essays and other artificial incentives for thinking by school children on civic problems.

What the committee says is all right so far as it goes, but why did the committee fail to recognize that what is wanted at this time is a clear and definite pronouncement by a national organization on the operations of the Federal Trade Commission? For a year or more this commission has been discussing educational problems for which it seems to have no solution. It has compiled a huge volume of testimony, in which it has shown that a number of corporations have prepared for use in schools materials relating to the ownership of public utilities. The implication of the inquiry now being conducted by the Federal Trade Commission seems to be that there is impropriety in the use of these materials. There seems to be an insinuation that those who prepare these materials are corrupt and that the use of anything of this kind in the schools is a pedagogical crime.

When school people come together, do they express a judgment on such insinuations and implications? Do they tell the Federal Trade Commission that they are ready to face the issue that has

been raised and that educators have a clear collective judgment about the introduction of lessons relating to the ownership of public utilities? Not at all. School people indulge in pale and colorless remarks, while the Federal Trade Commission takes control of a matter which is primarily educational and conducts hearings which seem to be endless. In the meantime, superintendents and school boards continue to exhibit doubt as to the course which they should follow.

Some day there will appear in the ranks of education a commission which will be strong enough and clear-headed enough to take the position that American youth should be taught to think about the ownership of public utilities. The issues which public utilities present to modern civilization are infinitely more significant than are many of the items now faithfully canvassed in the courses administered in American institutions of learning.

There is some danger that school people will lose their self-respect if they allow federal commissions to solve their problems for them, especially if they leave to federal commissions the discussion of what should go into the curriculum.

ATTENDANCE ON THE HIGH SCHOOLS IN THE UNITED STATES

The following statement was published in the *United States Daily*.

Figures made public by the Bureau of Education indicate a growth in high-school attendance that is one of the most striking features in the educational development of the generation.

These figures show that in 1910 the attendance on public high schools was 915,000 but that by 1926 the figure had grown to 3,757,000. It had, in fact, multiplied itself by more than four in a brief sixteen years.

In addition to this growth in standard high schools, there has come into the field a new agency, the junior high school, which has developed to the point where its attendance is above 1,000,000, of which number more than 300,000 are of high-school rank.

Another striking feature of this situation is the fact that, of those who graduate from these schools, practically 50 per cent go on to some higher institution of learning. This is a much higher percentage than was shown previous to the present decade.

THE INGLIS LECTURE

The following editorial was published in the *New York Times*.

To honor the memory and perpetuate the spirit of the labors of Professor Alexander Inglis, who devoted his career to secondary education, his friends and his colleagues in the Harvard Graduate School of Education established shortly after his death, in 1924, a lectureship in the field of his special interest. The lecture for 1928, which has just been published, adds another valuable little volume, which can be read in an hour, to a collection that promises to become a library of first importance in secondary education. He left a "precious heritage" to his co-workers, and in these lectures he is still speaking through some of those whom he knew in life and deeply influenced by his thought and personality: Hanus, Flexner, Koos, Judd, and Counts.

The 1928 lecture, by Professor George S. Counts, of Teachers College, Columbia University, discusses issues which were raised in conversation with Professor Inglis shortly before his death and goes to the very roots of secondary-education problems. It has to do with "secondary education and industrialism." Its main thesis is that education must come to terms with industrial civilization and "discover its new tasks in this new age." That education has already a sense of this obligation is shown by its expansion of studies and its "almost feverish" search for subjects, by the tremendous growth of extra-classroom activities, and by the reorganization of the educational structure itself through establishing junior high schools and junior colleges. These changes have followed rather than anticipated the "revolutionary advance" in high-school attendance. Most of the teachers and administrators, in Professor Counts's opinion, opposed "the attack of the populace upon the ancient citadel of aristocracy." But in some communities virtually all the children of fit age are in high school.

Professor Counts enumerates the factors of our industrial civilization which have been chiefly responsible for this democratization of secondary education; among them, certain social ideals, the extension of elementary education, and the increase of wealth. But he has included one which, he says, should be pondered again and again. Statistics show that, while an earlier society had two children per adult to care for and educate, ours has but one. This means that, with the increased proportion of adults, the economic and labor burden is lifted from the shoulders of children. There is also the assumption, which parents will not generally accept, that, as the number of children increases, the solicitude of the parent for each tends to decrease.

"Society stubbornly chooses its own roads to salvation." It at one time thought that salvation was to be found in universal literacy, through the elementary school, with the higher schools beyond for the few. Now the high school is also insisted upon as essential for the many. Through it "the aspirations of a new society are seeking expression."

A COMMENCEMENT PROJECT OF THE HIGH SCHOOL IN
DOYLESTOWN, PENNSYLVANIA

For eight years members of the Senior class of the high school in Doylestown, Pennsylvania, have reported at commencement the results of a study of some topic deemed to be of importance to the members of the class and to the community. Last June the study related to the use pupils make of their leisure time. Three hundred and ninety-six unsigned reports from pupils in the high school furnished the facts.

The report in full is too long to quote. One section, prepared by Hanna Patterson, is as follows:

There is a general feeling that the ordinary high-school student is so rushed with recitations and classroom activities in school that he does not have a sufficient amount of time to prepare a large portion of his daily work in school. It is rather interesting to note that this study brings out the fact that each student in high school averages nearly ten periods unassigned out of a total of thirty-five periods per week, or two three-quarter-hour periods unassigned each day. What does the high-school student do with the unassigned or leisure time in school? He uses a little over seven of these vacant periods per week in preparing his work and approximately two and a half of these periods per week in the library.

The library is not only a valuable adjunct to all school work, but it also offers a wonderful opportunity for students to make profitable use of all leisure time. We find, however, that 103 out of the 396 who answered the inquiry do not even use the library on an average of one period per week. This means that more than one-fourth (26 per cent) of the students are not making use of the library either for supplementing and enriching their school work or for profitable leisure time.

Our study shows rather conclusively that the students for the most part are fairly well occupied from 9:00 A.M. to 4:00 P.M. in school. Their leisure time between the closing of school and the time they retire is another matter, which we shall present in the light of information given by the student body of the high school.

From the closing of school until the evening meal we find that there are 120 students who participate in some form of athletics. Of this number, 69 per cent (eighty-three) are boys, and 31 per cent (thirty-seven) are girls. It is interesting to note that a larger number of town students are more active in athletics at this time than those out of town but that the percentage of out-of-town girls exceeds that of the town girls.

Some of the opportunities which the school gives to the student to spend his leisure time after school hours, in addition to athletics, are the extra-curriculum activities. From the questionnaire we find that only 12 per cent (forty-

eight) of the students take advantage of these opportunities. This small percentage is easily explained because the participants in extra-curriculum activities are usually chosen because of ability in some line or other. This may also be explained by the fact that more than one-half of the student body is non-resident.

Perhaps the parents will be surprised to learn that 264, or 67 per cent, of the student body actually work at home between the closing of school and the evening meal. Of this number, who work at home after school, the greater percentage, or 66 per cent, are out-of-town pupils—a situation we have long suspected. The remainder, 34 per cent, are town pupils, proving that many more out-of-town pupils work at home at this time than town pupils.

Thirty of the 396 students admit to loafing, the town pupils having the majority, a fact to be considered in the problem of the utilization of leisure time. Of the remaining students, 117 read for pleasure; 96 prepare the next day's school work; and 44 work for pay.

When we consider the time between the evening meal and bedtime, we find that sixty-five, or one-sixth of the entire student body, admit that they are generally away from home at night. Without very much doubt, we can say that only about one-half of the student body prepare their school work at home during the evening. One hundred and fifty-eight, or 40 per cent, generally spend this time in pleasure reading, and 6 per cent work for pay away from home.

One of the most important phases of the questionnaire on leisure time naturally deals with the opportunities the students have for utilizing this time. "A collection of books" has the most adherents. Magazines, practice on a musical instrument, and individual hobbies rank next in line as the most frequent ways of spending spare time. Some of the hobbies mentioned are collections of stamps, coins, and insects; drawing; mechanics; and scrapbooks. Next in importance is the scout and brigade work, which has a following of 88, or 22 per cent of the student body.

Up to this part of our study we see what is generally done with leisure time both in and out of school during school days. We are led to believe that about 50 per cent of the student body is devoted to serious-minded pursuits. A further study of the data will show how leisure time is spent on Saturdays and how our opportunities are either wasted or improved.

COMMUNICATIONS REFERRING TO PRIVATE SCHOOLS

The following letter was written to George A. Boyce, of the Western Reserve Academy, Hudson, Ohio, by Theodore W. Anderson, president of the Minnehaha Academy, Minneapolis, Minnesota.

I have read your article in the May issue of the *School Review* with reference to the success or failure of the private school in America with great interest. There is much valuable material in your discussion. I think the administration of every private school should gratefully consider your conclusions. In some

respects, however, your comparisons between the private and public schools are unjust and misleading.

You state, for example, on page 358, that "about 75 per cent of the private schools employ no teachers who do not have at least a Bachelor's degree." Why do you not give the percentage of public schools that belong to the same class? Is it any higher? When you turn to the public schools, you take all the teachers in these schools combined and give the figure as 94 per cent. Why do you not give the figures for the teachers in the private schools in the aggregate? In practically every high school, whether private or public, there are some teachers, usually teaching vocational and similar subjects, who do not have a college degree. The figure for the public schools would therefore be greatly reduced if you applied the standard used in appraising the private schools. You state also that "in only about 5 per cent of the private schools do the majority of the teachers have either Masters' or Doctors' degrees." Why do you not give the corresponding figure for the public schools?

Furthermore, when you speak of the public schools, you take only those approved by the North Central Association. Why do you not follow the same principle when you refer to the private schools? In the latter case you include all the schools, whether accredited or not. I am positive that, if you had reversed your principle and compared the private schools accredited by the North Central Association with all public schools, whether approved or not, your figures would be reversed. To compare the best in one group with the rank and file in another group is neither accurate nor just.

I trust that you will not misunderstand the spirit in which this criticism is written. Private schools have, in the past, frequently failed to fulfil their purpose and have deserved much of the censure that has come upon them. Nevertheless, the facts about them should not be distorted. Many of them today have fully as high standards as have the public schools. In not a few instances, they are considerably higher.

Mr. Boyce replied to Mr. Anderson as follows:

I appreciate very much your interest in my article entitled "Is the Private School Fulfilling Its Function?" published in the May issue of the *School Review*.

With regard to the criticism which you have raised on the matter of professional training of teachers, I purposely drew comparisons between the mass of private schools and the public schools approved by the North Central Association of Colleges and Secondary Schools.

I meant to establish the very point which you have indicated, namely, that private schools as a group are being excelled by a large number of public schools (1,571 public high schools in nineteen states) on certain thoroughly worth-while counts. It would seem that, if private schools as a whole are to return to their former leading position in experimentation, the workers in them

should be superiorly equipped to conduct scientifically controlled investigations. Therefore, I find myself, in this case, in disagreement with your statement that "to compare the best in one group with the rank and file in another group is neither accurate nor just."

It is my contention that, when the mass of private schools is blazing the trail for even those public schools approved by the North Central Association, then and then only will the private school be fulfilling its function. As indicated in the last paragraph of my article, I feel that some sort of national organization would be most helpful—a forum in which private schools all over the country could get together for scientific investigation and for consideration of many problems pertinent to all.

I thank you for writing me as you did. I recognize that you, too, wish to arrive at an unbiased understanding of the private-school rôle, and I feel that nothing but good can come of such discussions.

RECONSTRUCTING THE SCHOOL SYSTEM

During the past few months the officers of the school system of New York City have been discussing a recommendation made by Associate Superintendent Edward Mandel in his annual report. Superintendent Mandel would substitute for the present educational system one made up of seven years in the elementary school followed by four years in the high school and three years in the junior college. After completing these fourteen years, students would pass either into a two-year college or into a professional school.

Superintendent Mandel points out that New York City formerly had a seven-year elementary school. He describes the junior high school as an institution which is no longer needed in view of the very general tendency for pupils to go to high school.

The facts with regard to the junior high schools in New York City are interesting. There are forty-four such schools enrolling 84,526 pupils. There are 115,662 pupils in the seventh and eighth grades in elementary schools. There is some inco-ordination between the junior high schools and the four-year high schools, much of which results from the fact that the tenth grade in the four-year high schools receives pupils who have been trained in the ninth grade in these schools and others who have been trained in the ninth grade in junior high schools.

Superintendent Mandel's report undoubtedly represents a view which is beginning to secure support in many quarters. The junior high school has demonstrated that seventh- and eighth-grade pupils

can master subjects which were formerly thought to be appropriate only for pupils in the ninth grade. It has long been recognized as desirable that those who are to enter the professions should do so earlier than is now possible under the American system of education. The appearance of the public junior college is a highly significant symptom of a general reorganization of the whole plan of education in the United States.

Those who are committed to the conservative maintenance of the existing status of any single branch of the American school system always resist any program of general reconstruction. Perhaps no group of educators welcomes less than do high-school teachers and administrators the suggestion that there be a new arrangement of the school system. Many high-school officers do not recognize the logical and social consequences of the fact that elementary education is completed earlier than it was during the last century, when the eight-year elementary school became intrenched.

Superintendent Mandel's program may not be the program which will be adopted in New York City or elsewhere in the country, but something of the type of readjustment of administrative units which he recommends is quite certain to come in the very near future.

THE EXPERIMENTAL COLLEGE AT THE UNIVERSITY OF WISCONSIN

For the last three years the newspapers and educational journals have published frequent descriptions of the Experimental College organized at the University of Wisconsin by Professor Alexander Meiklejohn. The announcement is now made that natural science is to be added to the curriculum, and it is pointed out that students in the Experimental College pursue elementary foreign language in the classes in the non-experimental liberal-arts college of the University. The curriculum of the new institution begins to resemble increasingly in its contents the familiar college curriculum which human experience of many generations has arrived at with less publicity than has attached to this experiment.

The latest official announcement regarding Professor Meiklejohn's experiment is as follows:

Brief answers to many questions which are commonly asked of the University of Wisconsin Experimental College are made in a new leaflet which has

been compiled by Dr. Alexander Meiklejohn, chairman of the college, preliminary to the third year of operation, which begins next fall.

The enrolment in the two years of the college this year was 193. In the fall of 1929 there will be places for about 110 or 120 Freshmen.

Paragraphs in the leaflet which answer questions about the college are in part as follows:

"The general plan of the course is to introduce a student into the ways of liberal thinking by getting him to study in the first year the Athenian civilization of the fifth century B.C., and in the second year the civilization of the United States in the nineteenth century.

"These two studies are intended to give introduction to literature, history, art and architecture, economics, politics, religion, anthropology, science, and philosophy, each in two different settings and each in relation to the others.

"Work in elementary foreign language is done in the regular university classes. Advanced language may be taken by the student independently under the supervision of an adviser.

"Beginning in the fall of 1929 the Sophomore class will be carried through a carefully worked-out course in one of the sciences in order to acquaint the student, through laboratory practice and special and general reading, with scientific method and the part scientific method plays in modern civilization. This course will be not for the sake of the particular science studied but for the sake of understanding the method of thought and investigation that underlies all the sciences. The science to be considered will be physics.

"The advisers are members of the regular university faculties and departments. Normally, each adviser gives two-thirds of his time to the college and gives one full course in the regular university classes. In some cases, however, advisers are giving only one-third time to the college.

"The Experimental College was established by the University to make careful study of the methods of teaching, the content of study, and the determining conditions of undergraduate liberal education. The new course of study has been organized, and upon the basis of the two years of experiment the advisers are now formulating with a good deal of confidence the teaching program of the two-year course."

Students who complete satisfactorily the two-year course are given Junior standing in the College of Letters and Science except that they must meet the regular requirements in foreign language, the bulletin states. Students are also allowed to take courses in regular university classes, subject to approval by their advisers.

Each adviser has in charge twelve students, keeping them ordinarily for six weeks, when new assignments are made. The most important feature of the teaching is said to be the weekly conference between adviser and pupil, in which the adviser seeks to discover what work the student is doing and how well he is doing it. There is also much informal conference and association.

At the end of the second year, the students are reported to the College of

Letters and Science with the usual grades of A, B, C, D, covering the full two-year course. Until the end of the second year no grades are given.

SECONDARY EDUCATION FOR FARMERS

The following summary of a report prepared by the Children's Bureau of the Department of Labor was published by the *United States Daily*.

The farmer must be prepared to understand and adopt improved business marketing methods and have an understanding of the economic and social questions involved in agriculture. His ranks must furnish the leaders to further his interests. Agriculture offers large opportunities for leadership to those with the proper qualifications and training. How seriously farm work interferes with schooling has been shown again and again, especially in the case of boys of twelve and over. Boys whose farm work cuts short their school days are not being given a fair chance in life, for in farming, as in every other industry and business, education pays.

Child agricultural workers in almost every locality in the Children's Bureau survey had been absent from school during the year of the survey for farm work, and farm work was almost invariably the chief cause of their absence. In the tobacco-growing districts of Kentucky almost one-half the farm children working on farms had missed from one to sixty days or more for work, the average absence being approximately three school weeks, and in North Dakota one-eighth of the girls and one-third of the boys of all ages included in the Children's Bureau study were out of school at least a month for work.

These absences are the more serious because of the shortness of the rural-school term; in 1924 the average rural-school term in the United States as a whole was nearly seven school weeks shorter than the average city-school term. Besides the actual loss of time, some of the working children are too tired and listless to do the required work when they return to school.

In summing up the situation with respect to the schooling of the farm worker, the report says:

"Staying away from school to work on the farm is sometimes defended on the ground that farm work provides valuable training. The social and moral value for growing boys and girls of almost any work, provided it is not too hard or otherwise injurious, especially work that is done to assist parents, cannot be gainsaid. Much of the farm work that children do is not educative in any other sense. The work that thousands do, especially in the one-crop sections, is not of a kind to train them to be better farmers than their parents.

"So much for the farm boy or girl. As for the city child whose schooling is interrupted in order that he may thin or pull beets, weed onions, or pick berries, tomatoes, cotton, hops, or tobacco, his work is mere drudgery, wholly lacking in any element of training for his future in the ranks of urban workers."

OFFICE RECORDS AND REPORTS IN SECONDARY SCHOOLS¹

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Much of the time devoted to office administration by secondary-school principals is spent in the preparation and use of records and reports. Records of pupils, teachers, supplies, properties, and funds must be kept, and reports must be made to the superintendent, the board of education, standardizing agencies, accrediting associations, and the state department of public instruction. Furthermore, the principal should constantly study the conditions in his school as revealed through records and reports in order that policies may be developed, modified, or justified in the light of the facts. The collection of data is a task which must be carried on continuously in modern secondary schools. The work should therefore be routinized in order that lapses in the records may be prevented and strain removed from those who are charged with the task of collecting and preserving the data.

Forms have been devised to aid in the standardization of data and in the establishment of routine procedures. The forms used in the administrative office indicate the character of the administrative records and reports. In a limited study of fifteen comparable secondary schools, Gray² found that the number of forms in use ranged from twenty-six to ninety-seven, the mean being between forty-five and forty-six. Six hundred and eighty-eight different forms were used by the fifteen schools. They were classified under 177 different descriptive titles, only twelve of which were common to all the

¹ This article is the seventh of a series of articles dealing with certain aspects of secondary-school administration. The first six articles were published in the issues of the *School Review* for October, November, and December, 1928, and January, February, and March, 1929.

² Matthew Robert Gray, "The Office Practice of High School Principals," pp. 54-55. Unpublished Master's thesis, Department of Education, University of Chicago, 1927.

fifteen schools. Of the twelve common forms, five were standard and were furnished to the schools. The great variation in the forms used by these schools implies similar variation in their office procedures and in the content of their records and reports.

It is the purpose of this article to consider not office forms but, rather, the types of office records and reports which are most common. The records discussed deal with individual pupils, school membership, teachers, and equipment and supplies.

RECORDS OF INDIVIDUAL PUPILS

Table I shows the different kinds of records of individual pupils kept by 522 representative secondary schools. This table shows that 94.1 per cent of these schools keep records of the attendance of individual pupils. The large schools in Group 9 (2,001-6,500) and the small schools in Group 1 (4-100) have the lowest percentages—88.4 and 88.9, respectively. Failure to account for the attendance of individual pupils is usually explained in the case of the large schools by the magnitude of the task of recording attendance and in the case of the small schools by the fact that the principals frequently have no clerical assistance. In either case, the real explanation can probably be found in lack of system in office administration. A matter of such vital importance to the progress of a pupil as his presence in the classroom should not be taken for granted. The fact that 94.1 per cent of the secondary schools studied keep records of attendance is convincing evidence that such records are essential in secondary-school administration.

A few schools place the responsibility for attendance solely on the pupil, and records of attendance, tardiness, and unexcused absences are not kept. Table I shows that the practice with respect to recording tardiness is about the same as the practice with respect to recording attendance. In the case of unexcused absences the percentage of schools which keep records is somewhat lower. The small schools in Group 1 (4-100) are the worst offenders.

Period transfers may become a source of great annoyance to teachers and much loss to pupils unless the transfers are checked carefully and records are kept to detect abuses of the practice on the part of either teachers or pupils. Table I shows that approximately

one-fourth of the 522 schools neglect to keep records of period transfers. The schools in Group 2 (101-200) rank lowest, with 51.7 per cent; the schools in Groups 1 (4-100) and 3 (201-300) are next, with 66.7 per cent and 69.1 per cent, respectively. The variation in practice among the schools in Groups 4-9 (301-6,500) is slight, the range in percentages being only 4.4.

TABLE I
PERCENTAGE OF SCHOOLS IN EACH ENROLMENT GROUP WHICH KEEP EACH
OF EIGHTEEN TYPES OF RECORDS OF INDIVIDUAL PUPILS

TYPE OF RECORD	ENROLMENT GROUPS*									TOTAL
	1	2	3	4	5	6	7	8	9	
1. Attendance.....	88.9	96.6	92.7	98.7	98.6	94.3	90.5	93.0	88.4	94.1
2. Tardiness.....	88.9	100.0	94.5	98.7	98.6	96.6	89.5	93.0	90.7	94.8
3. Unexcused absences.....	66.7	86.2	80.0	85.3	87.5	80.5	83.2	84.2	81.4	83.1
4. Period transfers.....	66.7	51.7	69.1	78.7	79.2	79.3	81.1	80.7	76.7	76.6
5. Cases of discipline.....	55.6	65.5	54.5	68.0	69.4	71.3	82.1	78.9	74.4	71.3
6. Participation in extra-curriculum activities.....	77.8	72.4	58.2	60.0	60.4	58.6	65.3	63.2	58.1	63.0
7. Special permits.....	44.4	44.8	45.5	59.3	66.7	67.8	84.2	86.0	74.4	69.3
8. Unsatisfactory work.....	66.7	82.8	80.0	85.3	83.3	78.2	86.3	89.5	79.1	83.0
9. Periodic reports to parents.....	88.9	82.8	80.0	86.7	88.9	86.2	91.6	86.7	78.3	86.8
10. Cumulative record cards.....	44.4	93.1	85.5	84.0	91.7	93.1	94.7	78.6	0.95	89.7
11. Cumulative folders.....	11.1	37.9	40.0	42.7	38.9	41.4	29.5	38.6	44.2	38.1
12. Achievement tests.....	55.6	58.6	65.5	66.7	66.7	72.4	72.6	60.1	46.0	56.9
13. Psychological tests.....	55.6	55.2	69.1	72.0	77.8	82.8	76.8	78.9	93.7	75.7
14. Medical examinations.....	44.4	65.5	63.6	73.3	69.4	62.1	65.3	66.7	79.1	67.2
15. Physical examinations.....	44.4	41.4	50.9	65.3	61.1	56.3	61.1	70.2	81.4	61.1
16. Immunization.....	44.4	34.5	40.0	37.3	44.4	32.2	43.2	56.1	58.1	42.5
17. Accidents.....	22.2	3.4	20.0	30.7	19.4	27.6	42.1	38.6	79.1	32.8
18. Daily programs.....	77.8	89.7	89.1	94.7	100.0	98.9	100.0	94.7	93.0	95.8

* Group 1 (4-100), 9 schools; Group 2 (101-200), 29 schools; Group 3 (201-300), 55 schools; Group 4 (301-500), 75 schools; Group 5 (501-700), 72 schools; Group 6 (701-1,000), 87 schools; Group 7 (1,001-1,500), 95 schools; Group 8 (1,501-2,000), 57 schools; Group 9 (2,001-6,500), 43 schools.

Although discipline in the modern secondary school is usually not a serious problem, the administrative offices have to deal with individual cases referred by teachers and with cases of misbehavior and infraction of rules in the building, on the school grounds, and in the school community. Unless records are kept of the cases dealt with and intelligent follow-up measures are adopted, office discipline becomes little more than a perfunctory process. Table I shows that 71.3 per cent of the schools keep records of their cases of discipline. The range in percentages is from 54.5 for Group 3 (201-300) to 82.1 for Group 7 (1,001-1,500).

The recognition of participation in extra-curriculum activities as

a means of enlarging and enriching the education of the pupil in the secondary school creates the added administrative responsibility of directing and supervising such participation. Unless records are kept of the participation of the individual pupil in extra-curriculum activities, little assurance can be had that balanced training is received. In spite of the newness of organized extra-curriculum activities in the modern secondary school, 63.0 per cent of the 522 schools attempt to keep some kind of record of the participation of individual pupils. The small schools in Groups 1 and 2 (4-200) lead the schools in the other groups in recording the extra-curriculum activities of pupils. The large schools in Group 9 (2,001-6,500) rank lowest, with 58.1 per cent.

The special permits issued to pupils in many schools to absent themselves from regular classroom work are significant in that they may reveal important information regarding individual pupils or individual teachers. Table I shows that the small schools in Groups 1-3 (4-300) are less inclined to keep records of special permits than are the middle-sized schools in Groups 4-6 (301-1,000) or the large schools in Groups 7-9 (1,001-6,500). The increased emphasis placed on this type of accounting in the larger schools is probably due to the greater possibilities which exist in the larger schools for pupils to evade responsibility, to waste time, and to become problems for administrative control. Records enable the administrative officer to establish responsibility and to deal directly with causal conditions. In the small schools the pupils are usually known personally by the principal and the teachers, and evasion of responsibility by the pupils is therefore difficult. Accordingly, permits are usually granted orally, and no effort is made by the administrative officer to keep records.

Many schools require special reports from the teachers when the progress of pupils is found to be unsatisfactory. These reports are mailed to the parents and are studied by the principal or the counselor with a view to diagnosing the pupils' difficulties and to giving advice with regard to corrective or remedial work. The purpose of the reports is to identify the cases of possible failure before maladjustment becomes serious. The reports must be read by a responsible officer of administration and the office procedure in dealing with the reports indicated. For example, if the parent is to be noti-

fied and the report filed, the task can be performed by a clerk; if a conference is desired with the teacher, parent, or pupil, the arrangements can be made by a clerk; if the report is to be referred to the dean of girls, counselor of boys, home-room adviser, or case-study worker, a note must be written or a conference held between the administrative officer and the officer in question. Whatever the action, records are necessary. Good routine in the office makes possible correct records, which in turn make possible better pupil-accounting.

Table I shows that 83.0 per cent of the 522 schools keep records of the special reports of unsatisfactory work of individual pupils. With the exception of the percentage for Group 1 (4-100), the percentages for the different groups of schools do not vary much. The data do not show what the schools do to adjust pupils whose work is unsatisfactory. However, the fact that records of unsatisfactory work are kept makes possible better co-operation between the school and the home and the development of a guidance program.

Table I shows that 86.8 per cent of the schools keep records of the periodic reports to parents regarding the progress of individual pupils. Whatever the form of the records, they provide a more detailed account of pupil progress than do statements of credits earned during the semester or the school year. The periodic reports furnish a continuous record of progress, which makes possible case study as well as current appraisal. The high percentage for all schools and the small amount of variation among the groups of schools show that the practice of keeping records of the periodic reports of the progress of individual pupils is well established in the large majority of schools.

The cumulative record card is a labor-saving device designed to make for permanence and convenience in the recording of credits of individual pupils. The card is still unstandardized although a committee of the National Association of Secondary-School Principals recommended standard forms¹ in February, 1928. Table I shows that cumulative record cards are kept by 89.7 per cent of the 522 schools. The small schools in Group 1 (4-100) rank the lowest, with

¹ *Proceedings of the Twelfth Annual Meeting of the National Association of Secondary-School Principals* (1928), pp. 173-74. Bulletin of the National Association of Secondary-School Principals, Number 20.

44.4 per cent. This low percentage is probably due to the fact that records are kept in the form of a book or school register rather than in the form of cumulative cards and the principals do not find the advantages of the cumulative card sufficient to warrant the additional clerical labor involved in keeping both the registers and the cards.

As a means of avoiding the labor of transferring important data regarding individual pupils to record forms, some schools provide a cumulative folder for each pupil to serve as a receptacle for valuable record material. In most cases the transfer of this material would involve considerable time and labor, and in many cases the material is of such a nature that it cannot be transferred to record forms. The folders make possible the accumulation of valuable case material with a minimum expenditure of time. While only 38.1 per cent of the 522 schools reported the use of cumulative folders, the fact that 95.6 per cent of the schools have filing cabinets makes possible the development of the plan when its merits are realized. The percentage of schools using folders ranges from 11.1 for Group 1 (4-100) to 44.2 for Group 9 (2,001-6,500).

The development of standard achievement and psychological tests has made possible not only a more accurate appraisal of the educational status of individual pupils but also a better diagnosis of difficulties and a more reliable measurement of growth. Table I shows that 66.9 per cent of the 522 schools keep records of the scores made by the pupils on achievement tests; 75.7 per cent of the schools keep records of the scores made on psychological tests. There is thus a tendency to record the newer kinds of data regarding pupils. The small schools in Groups 1 and 2 (4-200) rank the lowest in both cases. The large schools in Group 9 (2,001-6,500) rank seventh in recording the results of achievement tests but first in recording the results of psychological tests. The practice of recording the results of psychological tests is more common than is the practice of recording the results of achievement tests in all groups of schools except Groups 1 and 2 (4-200).

Sixty-seven and two-tenths per cent of the 522 schools keep records of the medical examinations of individual pupils; 61.1 per cent of the schools keep records of physical examinations; 42.5 per

cent of the schools keep immunization records; and 32.8 per cent of the schools keep records of accidents. The close relation between the physical condition of pupils and their school progress justifies the collection of data which contribute to an understanding of the health and physical condition of the pupils and make possible better guidance of the pupils. The collection of such data indicates a tendency to assume greater responsibility for the welfare of pupils.

It is difficult to understand how an administrative office can account for the pupil personnel without a record of the daily programs of individual pupils. Obviously, if the enrolment of a school is so small that the principal knows the schedule of each pupil, little reason exists for recording the programs. However, in the case of large schools, such as those in Groups 8 and 9 (1,501-6,500), the lack of office records of individual programs would seem to indicate inefficient methods of administration. The high percentage of 95.8 for the 522 schools, however, shows that the keeping of records of the daily programs of pupils in secondary schools is a very general practice.

RECORDS OF SCHOOL MEMBERSHIP

In addition to the numerous records of individual pupils, 93.5 per cent of the schools keep records of the total enrolment, and 86.6 per cent of the schools keep membership lists of the various classes. Such data are essential if administrative officers are to know the magnitude of the problems of education as applied to their schools. The cost of instruction, the need for classroom space, and the amount of equipment and supplies needed depend on the total enrolment. In fact, the solution of the great majority of administrative problems depends on the answer to the question: How many pupils must be provided for? Knowledge of the individual pupil is important, but the number of individuals must be known before school policies can be formulated and school practices planned.

Table II shows that the problem of keeping membership records is recognized to about the same extent by the different groups of schools. The range in percentages for the nine groups is only 6.9. The percentage for the small schools in Groups 1-3 (4-300) is 91.4; for the middle-sized schools in Groups 4-6 (301-1,000), 93.6; and for the large schools in Groups 7-9 (1,001-6,500), 94.4. The slight

differences may indicate that the need for data relating to enrolment becomes more acute, although no more important, as the schools increase in size.

Unless the attendance is determined daily, the administrative office may be misled regarding the pupil load of a school. It is important, therefore, that the records show the average daily attendance as well as the total enrolment. While the enrolment always shows the maximum possible pupil load of the school, a high rate of

TABLE II
NUMBER AND PERCENTAGE OF SCHOOLS IN EACH ENROLMENT GROUP WHICH
KEEP RECORDS OF ENROLMENT AND AVERAGE DAILY ATTENDANCE

ENROLMENT GROUP	NUMBER OF SCHOOLS	RECORDS OF ENROLMENT		RECORDS OF DAILY ATTENDANCE	
		Number	Per Cent	Number	Per Cent
1 (4-100)	9	8	88.9	6	66.7
2 (101-200)	29	26	90.0	26	90.0
3 (201-300)	55	51	92.7	49	89.1
4 (301-500)	75	70	93.3	66	88.0
5 (501-700)	72	68	94.4	64	88.9
6 (701-1,000)	87	81	93.1	80	92.0
7 (1,001-1,500)	95	91	95.8	87	91.6
8 (1,501-2,000)	57	54	94.7	53	93.0
9 (2,001-6,500)	43	39	90.7	40	93.0
Total	522	488	93.5	471	90.2

absence may alter very greatly the problem of accommodating the load. With the exception of the small schools in Group 1 (4-100), the deviation from the average of the different groups of schools with respect to the practice of keeping records of average daily attendance is slight. Table II shows that 90.2 per cent of the 522 schools keep such records.

RECORDS PERTAINING TO TEACHERS

Table III shows that only 30.8 per cent of the 522 schools keep records of the applications of candidates for teaching positions. In the light of Eikenberry's data¹ which show that only 34 per cent of approximately one thousand principals interviewed teachers and

¹ Dan Harrison Eikenberry, *Status of the High School Principal*, p. 55. Bureau of Education Bulletin No. 24, 1925.

that only 9 per cent had final authority in appointing teachers, it is hardly reasonable to expect principals to take great interest in keeping records of the applications of teachers for possible appointments. However, by accumulating information with respect to available teachers through the keeping of records of desirable applicants, a principal might do much toward changing the practices of a superintendent who does not consult him in the selection of teachers.

If principals were thoroughly conversant with the academic and professional qualifications of their teachers, better assignments of

TABLE III
PERCENTAGE OF SCHOOLS IN EACH ENROLMENT GROUP WHICH KEEP EACH
OF FOUR TYPES OF RECORDS PERTAINING TO TEACHERS

Enrolment Group	Number of Schools	Records of Applications for Teaching Positions	Records of Academic and Professional Qualifications of Teachers	Records of Absence of Teachers	Records of Annual Rating of Teachers
1 (4-100).....	9	33.3	77.8	55.6	11.1
2 (101-200).....	29	55.2	75.9	44.8	20.7
3 (201-300).....	55	38.2	78.2	65.5	29.1
4 (301-500).....	75	34.7	92.0	65.3	41.3
5 (501-700).....	72	25.0	86.1	86.1	63.9
6 (701-1,000).....	87	34.5	86.2	85.1	59.8
7 (1,001-1,500).....	95	18.9	81.1	92.6	61.1
8 (1,501-2,000).....	57	24.6	84.2	84.2	75.4
9 (2,001-6,500).....	43	34.9	90.7	90.7	81.4
Total.....	522	30.8	84.7	79.3	55.2

teachers to classes could be made. Furthermore, records of the academic and professional training of the teachers are of considerable value in making reports to accrediting agencies and in answering inquiries with regard to the teachers.

It is encouraging to note that 84.7 per cent of the 522 schools keep office records of the academic and professional qualifications of their teachers. The small schools in Groups 1-3 (4-300) rank the lowest, with 77.4 per cent; the large schools in Groups 7-9 (1,001-6,500) are second, with 84.1 per cent; and the middle-sized schools in Groups 4-6 (301-1,000) rank the highest, with 88.0 per cent. The data show that in the large majority of cases secondary-school principals employ records as a means of keeping themselves in-

formed with regard to the academic and professional qualifications of the teachers in their schools.

If deductions are made in the salaries of teachers on account of absence, the principal must keep a record of the time lost. Regardless of whether the payroll is affected by the absence of teachers, records of absence on the part of the teachers are important for the information of the principal. It is not surprising, therefore, that 79.3 per cent of the 522 schools keep such records. The small schools in Groups 1-3 (4-300) rank the lowest, with 58.1 per cent; the middle-sized schools in Groups 4-6 (301-1,000) are second, with 79.1 per cent; and the large schools in Groups 7-9 (1,001-6,500) lead, with 89.7 per cent.

Two hundred and eighty-eight, or 55.2 per cent, of the 522 principals rate their teachers annually and keep records of their ratings. The small schools in Groups 1-3 (4-300) follow the practice in 24.7 per cent of the cases; the middle-sized schools in Groups 4-6 (301-1,000), in 55.1 per cent of the cases; and the large schools in Groups 7-9 (1,001-6,500), in 69.7 per cent of the cases. The data probably mean that both the annual rating of teachers and the recording of the results are responsibilities required of principals with increasing frequency as the schools increase in size. Only one school among the nine small schools in Group 1 (4-100) keep records of teachers' ratings, while thirty-five of the forty-three large schools in Group 9 (2,001-6,500) keep such records. With one exception, the data in Table III show an increase in the practice from group to group.

RECORDS OF EQUIPMENT AND SUPPLIES

Records of departmental equipment and supplies are kept in the majority of the 522 schools (Table IV). The small schools in Groups 1-3 (4-300) keep records of departmental equipment in 68.8 per cent of the cases and records of departmental supplies in 63.4 per cent of the cases; the middle-sized schools in Groups 4-6 (301-1,000) follow the practices in 82.1 per cent and 78.2 per cent of the cases, respectively; and the large schools in Groups 7-9 (1,001-6,500), in 87.7 per cent and 81.0 per cent of the cases, respectively. Both the making of inventories and the keeping of records are facilitated by

the department plan. The principal can delegate the responsibility to the department heads or to teachers who should be familiar with

TABLE IV
NUMBER AND PERCENTAGE OF SCHOOLS IN EACH ENROLMENT GROUP WHICH
KEEP RECORDS OF DEPARTMENTAL EQUIPMENT AND SUPPLIES

ENROLMENT GROUP	EQUIPMENT		SUPPLIES	
	Number	Per Cent	Number	Per Cent
1 (4-100).....	6	66.7	5	55.6
2 (101-200).....	19	65.5	16	55.2
3 (201-300).....	39	70.9	38	69.1
4 (301-500).....	63	84.0	59	78.7
5 (501-700).....	61	84.7	56	77.8
6 (701-1,000).....	68	78.2	68	78.2
7 (1,001-1,500).....	81	85.3	74	77.9
8 (1,501-2,000).....	51	89.5	50	87.7
9 (2,001-6,500).....	39	90.7	34	79.1
Total.....	427	81.8	400	76.6

the equipment and supplies of their departments. Departmental records are also an advantage in budget-making and in standardizing the opportunities provided by the school.

TABLE V
NUMBER AND PERCENTAGE OF SCHOOLS IN EACH ENROLMENT GROUP WHICH
KEEP RECORDS OF GENERAL EQUIPMENT AND SUPPLIES

ENROLMENT GROUP	EQUIPMENT		SUPPLIES	
	Number	Per Cent	Number	Per Cent
1 (4-100).....	7	77.8	5	55.6
2 (101-200).....	20	69.0	18	62.1
3 (201-300).....	42	76.4	40	72.7
4 (301-500).....	65	86.7	62	82.7
5 (501-700).....	61	84.7	54	75.0
6 (701-1,000).....	66	75.9	67	77.0
7 (1,001-1,500).....	77	81.1	78	82.1
8 (1,501-2,000).....	52	91.2	49	86.0
9 (2,001-6,500).....	37	86.0	34	79.1
Total.....	427	81.8	407	78.0

Records of general equipment and supplies which do not belong to particular departments are kept by the majority of the schools.

The data in Table V show that the practice is general in the different groups of schools. The large schools exhibit the practice more commonly than do the small schools.

Table VI shows that records of library books are kept in 86.8 per cent of the 522 schools and that records of textbooks owned by the schools are kept in 77.2 per cent of the schools. In the case of library books there is little variation in practice in the different groups of schools, the range in percentages being only 12.9. The variation is considerably greater in the case of textbooks, the range in percentages being 25.8. In both instances, however, the small schools in Group 1 (4-100) rank the lowest, with percentages of 77.8 and 55.6, respectively.

TABLE VI

NUMBER AND PERCENTAGE OF SCHOOLS IN EACH ENROLMENT GROUP WHICH
KEEP RECORDS OF LIBRARY BOOKS AND TEXTBOOKS

ENROLMENT GROUP	LIBRARY BOOKS		TEXTBOOKS	
	Number	Per Cent	Number	Per Cent
1 (4-100).....	7	77.8	5	55.6
2 (101-200).....	23	79.3	19	65.5
3 (201-300).....	47	85.5	41	74.5
4 (301-500).....	68	90.7	61	81.3
5 (501-700).....	65	90.3	54	75.0
6 (701-1,000).....	71	81.6	66	75.9
7 (1,001-1,500).....	84	88.4	77	81.1
8 (1,501-2,000).....	51	89.5	45	78.9
9 (2,001-6,500).....	37	86.0	35	81.4
Total.....	453	86.8	403	77.2

REPORTS

In some instances records are in themselves reports, but in other instances records require tabulation and interpretation before the information desired can be obtained. The records of a school should be made in a form which facilitates the preparation of official reports.

Table VII shows that the principals of 74.1 per cent of the 522 schools make annual reports to the superintendent and board of education and that the principals of 60.0 per cent of the schools make special reports to the superintendent and board of education. Annual reports are more common in the small schools in Groups 1-3

(4-300) than in the middle-sized and large schools, the percentage for the small schools being 78.5. The middle-sized schools in Groups 4-6 (301-1,000) have a percentage of 73.5, and the large schools in Groups 7-9 (1,001-6,500) have a percentage of 72.8. The reverse is true in the case of special reports. The large schools in Groups 7-9 (1,001-6,500) lead with a percentage of 68.2; the middle-sized schools in Group 4-6 (301-1,000) are second, with 56.8 per cent; and the small schools in Groups 1-3 (4-300) rank lowest, with 50.5 per cent. The data show that three principals out of four make

TABLE VII
PERCENTAGE OF SCHOOLS IN EACH ENROLMENT GROUP WHICH
MAKE EACH OF SEVERAL TYPES OF REPORTS

Enrolment Group	Number of Schools	Annual Report to Superintendent and Board of Education	Annual Report to Accrediting Association	Annual Report to State Department of Education	Special Reports to Superintendent and Board of Education
1 (4-100).....	9	66.7	77.8	88.9	44.4
2 (101-200).....	29	86.2	69.0	89.7	58.6
3 (201-300).....	55	76.4	76.4	74.5	47.3
4 (301-500).....	75	73.3	74.7	84.0	56.0
5 (501-700).....	72	79.2	79.2	81.9	54.2
6 (701-1,000).....	87	69.0	82.8	80.5	59.8
7 (1,001-1,500).....	95	70.5	70.5	67.4	68.4
8 (1,501-2,000).....	57	73.7	75.4	70.2	71.0
9 (2,001-6,500).....	43	76.7	79.1	58.1	62.8
Total.....	522	74.1	76.2	75.9	60.0

annual reports to the superintendent and board of education and that three principals out of five make special reports, presumably both voluntarily and on request.

The majority of the 522 schools maintain relations with accrediting agencies. In most instances the accrediting agency is the state department of education or an association of colleges and secondary schools or both. The individual to whom reports are made both for the state department of education and for the accrediting association is usually the high-school inspector of the state.

The data in Table VII show that 76.2 per cent of the 522 schools make reports to accrediting associations and that 75.9 per cent of the schools make reports to the state department of education. The percentages for the two types of reports for the small schools in

Groups 1-3 (4-300) are 74.2 and 80.6, respectively; for the middle-sized schools in Groups 4-6 (301-1,000), 79.1 and 82.1, respectively; and for the large schools in Groups 7-9 (1,001-6,500), 73.8 and 66.2, respectively. The large schools apparently have less contact with the state department of education than do either the middle-sized schools or the small schools.

CONCLUSIONS

The data presented regarding the practices of keeping records in secondary schools show a marked tendency on the part of administrative officers to collect and preserve a variety of information regarding individual pupils, school membership, the teaching staff, and equipment and supplies, which may be used in making reports to the superintendent, board of education, state department of education, and accrediting associations. The handling of the data presents problems in office administration which require foresight, constructive planning, and the development of efficient office practices. Without knowledge of the character of the records and the nature of the reports which are current in administration, principals may fail to provide for the recording of information that is of vital importance to the schools.

Recording and reporting require considerably less labor in the small schools than in the large schools. The principal of the small school may neglect to record valuable items of information because of his familiarity with them, but the school suffers when he accepts another position, as he frequently does. The principal of the large school at the other extreme feels the press of large responsibilities and accordingly concludes that the expense and the labor involved in recording certain data are greater than are the values derived. If he decides to keep only the most necessary records, the school suffers. The problem of recording and reporting in small, medium-sized, and large schools will not be satisfactorily solved until principals develop comprehensive systems of records for their schools. Good forms must be devised, and routine procedures must be established for the making and filing of records. Reports will then be possible without great labor and cost. Only by the adoption of such methods can principals approach a scientific administration of their schools.

SOME RESULTS OF THE ELECTIVE SYSTEM IN THE HIGH SCHOOLS OF DENVER

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In Kelly's report of his study of the American arts college, he states a rather common criticism by college teachers of the output of high schools.

"Hodgepodge," "cafeteria-fed minds," and other phrases indicate the view which many faculty people have about the products of high schools under the prevailing elective system.¹

Jessen writes as follows:

One of the important developments in American secondary education during the past thirty years has been the widespread adoption of the elective system. Our earlier schools did not embarrass the pupil with curricular choices. The educational bill of fare was definitely *table d'hôte*. With the advent of new courses, it became evident that not even adolescent appetite could be relied upon to have taste and time for all pedagogical dishes. Elimination of some of the former offerings was frowned upon by the older patrons and was frequently not favored by the newcomers. To care for new courses and still retain the old ones an *à la carte* service was needed. Thus came about the entry of the elective system.²

The study here reported was undertaken to determine some results of the elective system in the high schools of Denver, Colorado. It is based on an analysis of the units completed in Grades IX-XII by 2,904 graduates in the classes of 1926 and 1927. Answers to the following questions were secured.

1. How many different combinations of subject groups of two or more units each were completed?
2. What combinations of subject groups of two or more units each were completed by ten or more graduates?

¹ Frederick J. Kelly, *The American Arts College*, p. 29. New York: Macmillan Co., 1925.

² Carl A. Jessen, *Requirements for High-School Graduation*, p. 1. Bureau of Education Bulletin No. 21, 1928.

3. How many different combinations of subject groups of three or more units each were completed?
4. What combinations of subject groups of three or more units each were completed by more than ten graduates?
5. What is the median number of units completed in combinations of subject groups of two or more units each?
6. What is the median number of units completed in each subject group?
7. What percentage of the graduates completed two or more units in each subject group?
8. What percentage of the graduates completed three or more units in each subject group?
9. How does the mean number of units completed in each subject group and the percentage distribution of the mean numbers of units completed compare with corresponding data for New York City?

In this report the method of the study can be only briefly indicated. From the records of the schools, tabulation sheets were prepared which showed for each graduate the number of units completed in each of the eleven subject groups. From the data thus obtained, the facts reported in the tables in this article were derived.

The main findings of the study may be stated briefly as follows:

1. Two hundred and fourteen different combinations of subject groups of two or more units each were completed.
2. Forty-four combinations of subject groups of two or more units each were completed by ten or more graduates. The most common combination consisted of English, foreign language, social science, mathematics, and science. This combination was completed by 903, or 31 per cent, of the graduates. The next most common combination included commerce in addition to the five subjects included in the most common combination. This combination was completed by 183, or 6 per cent, of the graduates. Table I lists the forty-four combinations of subject groups of two or more units each completed by ten or more graduates.
3. Eighty-four different combinations of subject groups of three or more units each were completed.
4. Thirty-four combinations of subject groups of three or more

TABLE I
 FORTY-FOUR COMBINATIONS OF SUBJECT GROUPS OF TWO OR MORE UNITS
 EACH COMPLETED BY TEN OR MORE GRADUATES AND NUMBER OF
 BOYS AND GIRLS WHO COMPLETED EACH COMBINATION

Combination	Number of Boys	Number of Girls	Total
English, foreign language, social science, mathematics, and science.....	470	433	903
English, foreign language, social science, mathematics, science, and commerce.....	90	93	183
English, foreign language, social science, and mathematics.....	49	54	103
English, foreign language, social science, mathematics, science, and art.....	64	33	97
English, foreign language, social science, and commerce.....	6	88	94
English, foreign language, social science, mathematics, and commerce.....	18	65	83
English, social science, mathematics, and science.....	53	17	70
English, foreign language, social science, mathematics, science, and home economics.....	0	49	49
English, foreign language, social science, mathematics, science, and physical education.....	12	36	48
English, social science, and commerce.....	0	45	45
English, social science, mathematics, science, and commerce.....	30	15	45
English, social science, mathematics, science, and industrial arts.....	42	0	42
English, foreign language, and commerce.....	1	39	40
English, foreign language, social science, and science.....	10	28	38
English, foreign language, social science, mathematics, science, and industrial arts.....	37	1	38
English, social science, mathematics, and commerce.....	14	22	36
English, foreign language, mathematics, and science.....	22	12	34
English, foreign language, social science, commerce, and home economics.....	0	33	33
English, foreign language, social science, mathematics, science, and music.....	20	11	31
English, foreign language, social science, science, and commerce.....	6	23	29
English, social science, commerce, and home economics.....	0	27	27
English, social science, science, and commerce.....	8	18	26
English, foreign language, social science, mathematics, and art.....	8	17	25
English, social science, mathematics, science, and art.....	19	3	22
English, foreign language, social science, mathematics, and home economics.....	0	21	21
English, foreign language, social science, mathematics, and industrial arts.....	20	0	20
English, social science, science, commerce, and home economics.....	0	17	17
English, foreign language, and social science.....	1	15	16
English, commerce, and home economics.....	0	16	16
English, foreign language, mathematics, science, and art.....	13	3	16
English, foreign language, social science, and home economics.....	0	15	15
English, social science, science, and home economics.....	0	14	14
English and commerce.....	1	11	12

TABLE I—*Continued*

Combination	Number of Boys	Number of Girls	Total
English, foreign language, mathematics, science, and commerce	8	4	12
English, social science, mathematics, science, and home economics	0	12	12
English, foreign language, mathematics, and industrial arts	11	0	11
English, foreign language, social science, mathematics, and music	3	8	11
English, social science, mathematics, commerce, and industrial arts	11	0	11
English, foreign language, social science, and art	2	8	10
English, foreign language, mathematics, and commerce	1	9	10
English, foreign language, commerce, and home economics	0	10	10
English, mathematics, science, and industrial arts	10	0	10
English, social science, mathematics, commerce, and home economics	0	10	10
English, social science, mathematics, science, commerce, and industrial arts	10	0	10
Total	1,070	1,335	2,405*

* The 409 graduates not included in this table completed 170 other combinations of subject groups of two or more units each.

units each were completed by more than ten graduates. The most common combination consisted of English and commerce. This combination was completed by 306, or 11 per cent, of the graduates. The next most common combination consisted of English and foreign language. This combination was completed by 284, or 10 per cent, of the graduates. Table II shows the thirty-four combinations of subject groups of three or more units each completed by more than ten graduates.

5. The median number of units completed in combinations of subject groups of two or more units each is 14.4. Table III shows the complete distribution.

6. The median number of units completed in English is 3.8; in foreign language, 2.8; in mathematics, 2.7; in social science, 2.6; in science, 2.4; in commerce, 1.3; in home economics (girls only), 1.0; in physical education, 0.7; in art, 0.6; in music, 0.5; and in industrial arts (boys only), 0.4. Table IV shows the distribution of the 2,904 graduates according to the number of units completed in each subject group. Table V shows the same facts reduced to percentages.

7. Table VI shows that 100 per cent of the graduates completed

two or more units in English; 87.5 per cent, in social science; 77.5 per cent, in mathematics; 77.2 per cent, in foreign language; 69.2

TABLE II
THIRTY-FOUR COMBINATIONS OF SUBJECT GROUPS OF THREE OR MORE UNITS
EACH COMPLETED BY MORE THAN TEN GRADUATES AND NUMBER OF
BOYS AND GIRLS WHO COMPLETED EACH COMBINATION

Combination	Number of Boys	Number of Girls	Total
English and commerce.....	40	266	306
English and foreign language.....	62	222	284
English, foreign language, and mathematics.....	130	118	248
English.....	80	147	236
English, mathematics, and science.....	154	24	178
English and mathematics.....	131	42	173
English and science.....	92	55	147
English, foreign language, mathematics, and science.....	102	44	146
English, foreign language, and social science.....	21	98	119
English and social science.....	51	65	116
English, foreign language, social science, and mathematics.....	49	61	110
English, foreign language, and commerce.....	7	77	84
English, foreign language, and science.....	25	51	76
English, social science, and mathematics.....	45	15	60
English, social science, and commerce.....	10	44	54
English and home economics.....	0	47	47
English and industrial arts.....	46	0	46
English, mathematics, and commerce.....	18	21	39
English, social science, and science.....	20	18	38
English and art.....	10	16	26
English, commerce, and home economics.....	0	26	26
English, social science, mathematics, and science.....	18	5	23
English, mathematics, and industrial arts.....	21	0	21
English, mathematics, and art.....	19	1	20
English, science, and industrial arts.....	17	0	17
English, foreign language, social science, and commerce.....	3	12	15
English, foreign language, social science, mathematics, and science.....	10	5	15
English, foreign language, social science, and science.....	4	10	14
English, foreign language, and art.....	7	6	13
English, foreign language, and home economics.....	0	13	13
English, science, and commerce.....	6	7	13
English, foreign language, mathematics, and physical education.....	0	12	12
English, mathematics, science, and industrial arts.....	12	0	12
English, science, and art.....	8	3	11
Total.....	1,227	1,531	2,758*

* The 146 graduates not included in this table completed fifty other combinations of subject groups of three or more units each.

per cent, in science; 34.2 per cent, in commerce; 22.5 per cent, in home economics (girls only); 20.7 per cent, in industrial arts (boys

only); 9.3 per cent, in art; 3.9 per cent, in music; and 2.8 per cent, in physical education.

TABLE III
NUMBER OF UNITS COMPLETED IN COMBINATIONS OF SUBJECT GROUPS
OF TWO OR MORE UNITS EACH BY THE 2,904 GRADUATES

NUMBER OF UNITS	BOYS		GIRLS		TOTAL	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
6.0-6.9.....	1	0.1	1	0.1	2	0.1
7.0-7.9.....	5	0.4	2	0.1	7	0.2
8.0-8.9.....	5	0.4	12	0.7	17	0.6
9.0-9.9.....	12	0.9	19	1.2	31	1.1
10.0-10.9.....	39	3.0	73	4.5	112	3.9
11.0-11.9.....	87	6.7	149	9.2	236	8.1
12.0-12.9.....	142	11.0	214	13.3	356	12.3
13.0-13.9.....	209	16.2	257	15.9	466	16.0
14.0-14.9.....	275	21.3	303	18.8	578	19.9
15.0-15.9.....	258	20.0	277	17.2	535	18.4
16.0-16.9.....	151	11.7	177	11.0	328	11.3
17.0-17.9.....	64	5.0	80	5.0	144	5.0
18.0-18.9.....	25	1.9	34	2.1	59	2.0
19.0-19.9.....	15	1.2	11	0.7	26	0.9
20.0-20.9.....	2	0.2	2	0.1	4	0.1
21.0-21.9.....	1	0.1	2	0.1	3	0.1
Total.....	1,291	100.0	1,613	100.0	2,904	100.0
First quartile.....	13.2	.....	12.7	.....	12.9	.....
Median.....	14.5	.....	14.3	.....	14.4	.....
Third quartile.....	15.7	.....	15.6	.....	15.7	.....

TABLE IV
DISTRIBUTION OF THE 2,904 GRADUATES ACCORDING TO THE NUMBER
OF UNITS COMPLETED IN EACH SUBJECT GROUP

SUBJECT GROUP	NUMBER OF UNITS						
	0	0.01- 0.99	1.00- 1.99	2.00- 2.99	3.00- 3.99	4.00 or More	Median
English.....	0	0	0	0	1,712	1,192	3.8
Foreign language.....	259	12	391	1,034	572	636	2.8
Mathematics.....	23	7	624	1,136	870	244	2.7
Social science.....	2	0	361	1,930	575	36	2.6
Science.....	16	7	872	1,278	587	144	2.4
Commerce.....	910	349	652	396	222	375	1.3
Home economics (1,613 girls).....	607	182	461	241	93	29	1.0
Physical education.....	205	1,827	792	73	7	0	0.7
Art.....	354	1,795	484	176	68	27	0.6
Music.....	309	2,158	325	96	13	3	0.5
Industrial arts (1,291 boys)	571	171	282	138	87	42	0.4

8. Table VII shows that 100 per cent of the graduates completed three or more units in English; 41.6 per cent, in foreign language; 38.4 per cent, in mathematics; 25.2 per cent, in science; 21.0 per

TABLE V
PERCENTAGE DISTRIBUTION OF THE 2,904 GRADUATES ACCORDING TO THE
NUMBER OF UNITS COMPLETED IN EACH SUBJECT GROUP

SUBJECT GROUP	NUMBER OF UNITS					
	0	0.01- 0.99	1.00- 1.99	2.00- 2.99	3.00- 3.99	4.00 or More
English.....	0.0	0.0	0.0	0.0	59.0	41.0
Foreign language.....	8.9	0.4	13.5	35.6	19.7	21.0
Mathematics.....	0.8	0.2	21.5	39.1	30.0	8.4
Social science.....	0.1	0.0	12.4	66.5	19.8	1.2
Science.....	0.6	0.2	30.0	44.0	20.2	5.0
Commerce.....	31.3	12.0	22.5	13.6	7.6	12.0
Home economics (1,613 girls).....	37.7	11.3	28.6	14.9	5.8	1.8
Physical education.....	7.1	62.9	27.3	2.5	0.2	0.0
Art.....	12.2	61.8	16.7	6.1	2.3	0.9
Music.....	10.6	74.3	11.2	3.3	0.4	0.1
Industrial arts (1,291 boys).....	44.2	13.2	21.8	10.7	6.7	3.3

TABLE VI
NUMBER AND PERCENTAGE OF THE 2,904 GRADUATES WHO
COMPLETED TWO OR MORE UNITS IN EACH
SUBJECT GROUP

Subject Group	Number	Per Cent
English.....	2,904	100.0
Social science.....	2,541	87.5
Mathematics.....	2,250	77.5
Foreign language.....	2,242	77.2
Science.....	2,009	69.2
Commerce.....	993	34.2
Home economics (1,613 girls).....	303	22.5
Industrial arts (1,291 boys).....	267	20.7
Art.....	271	9.3
Music.....	112	3.9
Physical education.....	80	2.8

cent, in social science; 20.6 per cent, in commerce; 10.0 per cent, in industrial arts (boys only); 7.6 per cent, in home economics (girls only); 3.3 per cent, in art; 0.6 per cent, in music; and 0.2 per cent, in physical education.

9. A comparison of the Denver high-school graduates with high-school graduates in New York City as to the mean number of units

completed in the various subject groups shows three important differences. In Denver the mean number of units completed in foreign language is 2.5 as compared with 4.0 in New York City; in Denver the mean number of units completed in social science is 2.2 as compared with 3.1 in New York City; in Denver the mean number of units completed in home economics and industrial arts is 1.0 as compared with 0.2 in New York City. Table VIII gives the facts for all the subject groups.

The data for the high-school graduates in Denver should be interpreted in the light of the requirements for graduation which

TABLE VII
NUMBER AND PERCENTAGE OF THE 2,904 GRADUATES WHO
COMPLETED THREE OR MORE UNITS IN
EACH SUBJECT GROUP

Subject Group	Number	Per Cent
English.....	2,904	100.0
Foreign language.....	1,208	41.6
Mathematics.....	1,114	38.4
Science.....	731	25.2
Social science.....	611	21.0
Commerce.....	597	20.6
Industrial arts (1,291 boys)	129	10.0
Home economics (1,613 girls)	122	7.6
Art.....	95	3.3
Music.....	16	0.6
Physical education.....	7	0.2

were in force for the classes considered. The class which graduated in 1926 was required to complete sixteen units for graduation. Of the sixteen units, ten had to be in academic subjects. The non-academic subjects were typewriting, art, music, physical education, military training, industrial arts, and home economics. All other subjects were classed as academic. Of the sixteen units, seven were prescribed: English, three units; mathematics, one unit; a composite of freehand drawing, mechanical drawing, physical education, and music, one unit in Grade IX; American history and civics, one unit; and science, one unit. The class which graduated in 1927 had to meet practically the same requirements with the additional requirement of one unit in world-history.

At the present time, the requirements for graduation are based on the three years of the senior high school. In the last year of the

junior high school, English, social science, and physical education are required. In the senior high school, two units of English, one unit of world-history, one unit of American history and civics, physical education for three years with one unit of credit, and one unit of science, mathematics, or foreign language are required. Two minors of two units each must be completed in addition to the required minors in English and social science.

It is not within the purpose of this article to draw any final conclusions. Certain questions are raised, however, by the data pre-

TABLE VIII

MEAN NUMBER OF UNITS COMPLETED IN EACH SUBJECT GROUP BY HIGH-SCHOOL GRADUATES IN DENVER AND NEW YORK CITY* AND PERCENTAGE EACH MEAN NUMBER OF UNITS IS OF THE TOTAL

SUBJECT GROUP	DENVER		NEW YORK CITY	
	Number	Per Cent	Number	Per Cent
English.....	3.6	20.9	4.0	21.3
Foreign language.....	2.5	14.5	4.0	21.3
Mathematics.....	2.3	13.4	2.2	11.7
Social science.....	2.2	12.8	3.1	16.5
Science.....	2.1	12.2	2.0	10.6
Commerce.....	1.5	8.7	1.2	6.4
Home economics and industrial arts.....	1.0	5.8	0.2	1.1
Physical education.....	0.8	4.7	0.8	4.3
Art.....	0.7	4.1	0.9	4.8
Music.....	0.5	2.9	0.4	2.1
Total.....	17.2	100.0	18.8	100.1

* The facts for New York City are adapted from a table in the annual report of John L. Tildeley, district superintendent of high schools, for the year 1927-28—"Teaching Science as a 'Way of Life,'" *Bulletin of High Points in the Work of the High Schools of New York City*, X (October, 1928), 7.

sented. Extensive investigations are required before answers can be given to these questions.

1. Does the elective system as it now operates in the high schools result in too wide variations in the completed programs of graduates?
2. Do college-entrance requirements give undue emphasis to foreign languages and mathematics?
3. Do commerce, home economics, industrial arts, art, and music constitute too small a part of the completed programs of high-school graduates?
4. Would it be desirable to change the present definition of a unit in order to make greater continuity of work possible through the carrying of five or six subjects instead of four?

THE EFFECTIVENESS OF CERTAIN REQUIREMENTS IN THE SELECTIVE ADMISSION OF COLLEGE STUDENTS

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Certain institutions of higher learning are enforcing college-entrance requirements which are intended to prevent the admission of individuals who would probably fail in college work. For example, admission is sometimes granted only if the prospective student has attained a certain minimum score on an intelligence test or a certain minimum average mark in his high-school courses. The practice of admitting to college only those students who are likely to succeed is referred to as selective admission. It frequently happens, however, that many students who are admitted through the process of selection fail sooner or later in their college careers. Consequently, there is need of evaluating the various requirements employed in selective admission.

This article presents in brief the results of a study undertaken for the purpose of analyzing the effectiveness of certain requirements which are enforced or might be enforced in selecting those high-school graduates who are to be admitted to college. The investigation was concerned with the students who entered the University of Chicago as Freshmen in October, 1924. The students' average marks in their four years of high-school work, their scores on a psychological examination, and their average marks in the courses taken at the University of Chicago during the period from October, 1924, to June, 1926, were considered. At the time of their matriculation, the students were given the Thurstone Psychological Examination for High School Graduates and College Freshmen, published by the American Council on Education. The score which a student made on this examination was used as a measure of his capacity to learn; his high-school average was employed as a measure of his earlier achievement; and his average mark in the courses taken during his first two

years at the University of Chicago was used as a measure of his college success. The latter average is referred to hereafter as the college average.

The validity of high-school averages and of psychological scores as entrance requirements was investigated by using the records for the entire class of students to determine the answers to the following questions: (1) How many of the students who failed in their college work would have been denied admission if a given requirement had been enforced when these students entered? (2) How many of the students who were successful in their college work would not have been admitted? Obviously, a desirable method of selection should bar from college as large a number of failing students as possible and as small a number of successful students as possible.

In order to secure admission to the University of Chicago, each member of the class entering in 1924 was required to have a high-school average of at least 81.25 on the basis of a passing mark of 75. In spite of this requirement and of other requirements enforced at the same time, one-third of the members of the class had failing college averages. Possibly the proportion of failing students would have been much smaller if a high-school average higher than 81.25 had been required for admission. An attempt was made to determine the validity of such a requirement. The results are shown in Table I. The percentages of both successful and failing students are large for all averages between 81 and 88. Consequently, if an average above 81.25 had been required for entrance to the university, a large number of failing students would have been denied admission, but many successful students would have been barred at the same time. For example, if the entrance requirement had been raised to an average of 83, sixty-four students would have been excluded from the university, 61 per cent of whom failed and 39 per cent of whom succeeded in their college work. From an administrative point of view, the requirement of an average higher than 81.25 might have been both convenient and economical, but, if genuine distinctions between successful and failing students were desired, supplementary methods of selection would have been necessary.

Table II was constructed for the purpose of determining the validity of a certain minimum score on the psychological examination as an entrance requirement. This table shows that large per-

centages of the students who had scores below 16 failed in their college work, but, of the total of 180 who failed, only 41 had scores below this point. If scores higher than 16 are considered, a large num-

TABLE I

DISTRIBUTION, ACCORDING TO THEIR HIGH-SCHOOL AVERAGES, OF STUDENTS
WHO SUCCEEDED AND OF STUDENTS WHO FAILED IN
THE UNIVERSITY OF CHICAGO

HIGH-SCHOOL AVERAGE	SUCCESSFUL STUDENTS		FAILING STUDENTS		TOTAL	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
81-82.....	25	39	39	61	64	100
83-84.....	42	47	48	53	90	100
85-86.....	44	54	38	46	82	100
87-88.....	57	60	38	40	95	100
89-90.....	63	89	8	11	71	100
91-92.....	52	90	6	10	58	100
93-98.....	73	96	3	4	76	100
Total.....	356	66	180	34	536	100

TABLE II

DISTRIBUTION, ACCORDING TO THEIR SCORES ON THE PSYCHOLOGICAL
EXAMINATION, OF STUDENTS WHO SUCCEEDED AND OF STU-
DENTS WHO FAILED IN THE UNIVERSITY OF CHICAGO

SCORE ON PSYCHOLOGICAL EXAMINATION*	SUCCESSFUL STUDENTS		FAILING STUDENTS		TOTAL	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
12-13.....	1	20	4	80	5	100
14-15.....	16	30	37	70	53	100
16-17.....	85	53	76	47	161	100
18-19.....	149	75	50	25	199	100
20-21.....	85	89	11	11	96	100
22-24.....	20	91	2	9	22	100
Total.....	356	66	180	34	536	100

* The scores represent the simplified standard or sigma scores.

ber of failures are included, but the number of successful students is also large. Consequently, if a minimum score had been required for entrance, a large number of failing students would have been barred only if many successful students had been denied admission at the same time. If the requirement had been placed low enough to bar only a negligible number of students who succeeded, the number of failing students barred would also have been small.

Although admission to college is sometimes restricted by making use of the high-school average alone or of the score on the psychological examination alone, it is possible also to combine the two methods. One way of effecting the combination is to construct a regression equation in which both the high-school average and the score on the psychological examination are used to predict the college average. Only those students are admitted whose predicted college averages equal or exceed a certain minimum.

The validity of such a procedure was determined by finding out the number of failing students and the number of successful students who would have been barred from the university. The results were very similar to those secured when the scores on the psychological examination were considered alone. A small group composed almost entirely of failing students would have been denied admission, but a large number of failing students would have been barred only if many successful students had also been denied admission. The correlations between high-school averages, scores on the psychological examination, and college averages are as follows: between the first and third variables, $.598 \pm .019$; between the second and third variables, $.501 \pm .022$; and between the third variable and the combined effect of the first and second variables, $.676 \pm .016$.

The fact that these correlations are not perfect is due to well-known factors. Only two comments need be made. First, the high-school average is a very abstract measure of achievement; it may even be deceptive because it gives no direct indication of the specific topics studied nor of the mastery of any of these topics. For example, a student's average may be high enough to secure his admission to college, but he may not have been taught in the high school, or he may not have mastered, those phases of learning which serve as a foundation for success in college. A detailed consideration of a student's earlier educational preparation may sometimes be necessary in order to determine his fitness for college work. Second, success in college is conditioned not only by capacity to learn and educational background but in part also by certain character traits, which ought also to be considered.

The method of anticipating success or failure in college by reference to earlier achievement was investigated further by means of

analytical studies of individual students who were failing in their college work. These analyses were made with the following purposes in view: (1) to discover any deficiencies in the student's elementary-school and high-school training, (2) to ascertain the causes of the deficiencies, and (3) to determine the effects of the deficiencies on success in college. The facts were obtained by interviewing the unsuccessful student, administering appropriate tests, and consulting available high-school and college records. In most cases the inquiries centered around English composition, reading, arithmetic, and methods of study. The tests used to determine the nature of the deficiencies included Monroe's Standardized Silent Reading Test, Whipple's High-School and College Reading Test, Thorndike's Test of Word Knowledge, Monroe's General Survey Arithmetic Scales, and Pressey's Diagnostic Tests in English Composition.

The results of the study indicated that the earlier training of students who were failing in college work was often markedly deficient. This fact applied particularly to the ability to read, slowness and inaccuracy in reading occurring more often than any other deficiency. Many of the failing students read by a process of deciphering, which required several readings in order to understand the material read and which commonly resulted in inaccurate comprehension or in failure to comprehend. A few students were actually lip-readers. Inability in English composition was discovered frequently, some of the students making scores on the Pressey tests as low as the seventh-grade standards even after having taken a course in composition in the university. Inability in arithmetic was found in several cases, the difficulties centering around the fundamental operations, common fractions, and decimals. The remaining deficiencies included faulty study habits and inadequate foundation in history, algebra, and foreign languages. The students attributed their shortcomings to the following factors: transferring often from one school to another, being absent from school frequently or for long periods, skipping grades, receiving poor instruction, and failing to devote the necessary time and effort to school work.

The important consideration for purposes of selective admission is, of course, the relation of the deficiencies to success in college work. Many students were unsuccessful because they possessed one

or more of the handicaps mentioned. The poor readers were compelled to devote many extra hours to the study of courses which involved extensive reading, and they frequently discovered that they could not do all the reading expected of them. They made very poor records in such courses, or they avoided them so far as possible because they realized their weakness or disliked to read. Reading plays some part in almost every subject of study, and in many subjects it plays a major rôle. It is logical, therefore, that inability in reading should have a significant relation to failure in college work. Students who were markedly deficient in English composition encountered difficulty immediately on entering the university; some of them were barred from the Freshman course in composition, and others failed in this course. A course in rhetoric is invariably required during the Freshman year of college, and such a course is based on the assumption that certain fundamentals have been mastered during earlier school work. Success in such a course is affected by deficiencies in these fundamentals. Success in other courses which necessitate extensive practice of either oral or written composition is also affected. Certain students failed in college work in mathematics, science, or accounting because of deficient training in arithmetic or in high-school mathematics. Other students, wishing to continue in the university the study of history, foreign languages, or sciences which they had begun in high school, failed in these subjects because of the inadequacy of their earlier training. Finally, the use of faulty methods of study frequently contributed to failure in college work.

The results of these analytical studies show that college failures can frequently be attributed to marked deficiencies in the educational background. Consequently, a knowledge of such handicaps would be valuable in attempting to anticipate the student's success or failure in college work. Of course, these deficiencies were not present in all the cases of failure studied; nor were they always present to a sufficient degree to produce failure. Furthermore, the effect of some of the deficiencies depended in part on the particular kind of work which the student pursued in college. The important fact, however, is that the selective admission of the students involved was ineffective to the extent to which it permitted the entrance of individuals who failed because of handicaps in their earlier training.

The remaining methods of selective admission investigated in this study attempt to anticipate success or failure in college by reference to certain character traits. These methods are alike in that they assume that success in college depends in part on such traits as industry, or application to studies; they differ as to the manner in which the strength of the traits is estimated.

In applying for admission to the University of Chicago, a student in the class under consideration was required to secure from one of his high-school teachers and from the principal statements describing his character traits. These statements were used, along with other data, to determine whether or not the applicant should be admitted. The validity of this method of selection was determined by comparing the statements made for the students who succeeded in the university with the statements made for the students who failed. The comparison showed that those who failed were frequently characterized in just as favorable a manner as were those who succeeded. This method of selection therefore resulted in the admission of certain students who were expected to succeed but who in reality failed.

The teachers' statements were misleading in many cases for a number of reasons. First, since the teacher was not required to discuss any specified traits, his characterization of the applicant was invariably incomplete. His statement usually omitted reference to one or more traits which presumably play important parts in success in college. The characteristics thus overlooked were neglected also in admitting the student to the university since no measure of them was available. The traits to be described, therefore, should have been specifically listed and defined. Second, if a student possessed a very favorable trait of one kind, it was likely so to color the teacher's judgment that he described the student favorably in other respects also, even in those in which he was deficient. Outstanding characteristics of one kind led to exaggeration in the same direction in the case of other traits. For example, a teacher was so fascinated by a student's pleasing personality that, instead of detecting the student's lack of application and of intellectual interests, he assumed that the student possessed these traits in sufficient degree to insure his success in the university. Third, the teacher who taught in a small high

school or in a private high school sometimes estimated a student's traits by standards which were too low because he had not had experience with pupils who were representative of the general high-school population. As a consequence, a student whom he characterized favorably because he was outstanding in his particular group of students was really mediocre when judged by the proper standards. Finally, the teacher's statement was sometimes inaccurate because his acquaintance with the student was confined to a very few contacts or to a very brief period of time. For example, a student had made relatively low marks in all his high-school subjects except chemistry, which was taught to him by the teacher who described his character traits. That the instructor was ignorant of the student's poor work in other courses was evident from the fact that he spoke of the student as one who did very well in all his work.

Although the statements which the high-school teachers made in estimating the character traits of the applicants for admission to the university were misleading in many cases, they were very helpful in many other cases. The results of the study do not indicate, therefore, that this method of selection should be abandoned; they suggest, rather, that the selective procedure would be more effective if the factors which cause statements to be untrustworthy were taken into account.

In applying for admission to the University of Chicago, a student in the class under consideration was required to supply certain information relative to the extent to which he had been, and expected to be, dependent on himself for support. Although the facts relative to self-support may furnish some indication of character traits, the exact value of such information for purposes of selective admission has been uncertain. In order to determine the bearing which the earning of a living has on success in college, analytical studies were made of individual students who supported themselves by working while attending college. The necessary facts were obtained by interviewing the students and their instructors in the university and by consulting the available records.

Most of the students who were entirely self-supporting had contributed toward their own support for many years while securing an education. They had engaged in remunerative occupations both

while attending high school and while pursuing college work. They had delayed their education either before or after graduation from high school in order to make possible the financing of their college careers. Some of them had faced hardships in order to secure an education through their own efforts, having completed their schooling up to the point of college entrance while supporting their families, earning money in the daytime and attending night school, or persisting in the face of a broken family life. The conditions under which most of the self-supporting students labored were such that only the more persistent and the more seriously intentioned had survived. Realizing the value of a college education, they were genuinely interested in intellectual pursuits. That their character traits were usually favorable was supported by the facts gathered from all available sources.

Some of the self-supporting students, however, had become maladjusted in the university because they were engaged in remunerative work. A few of them failed because they devoted too little time to study and too much time to gainful employment. They were either unaware of the fact that they were devoting too little time to their studies or reluctant to make the necessary adjustments. A few of the self-supporting students did poor work in college because their gainful employment resulted in frequent and unexpected interruptions in their study or in undue strain on their physical capacities. The fact that the continuation of a college career depended primarily on the earning of enough money to finance this career sometimes led to conditions unfavorable to the pursuit of college work. Finally, in the case of a few self-supporting students certain undesirable characteristics were evident. These students attended the university not primarily to enable them to pursue intellectual endeavors but chiefly in order to satisfy social or athletic ambitions. They slighted their studies intentionally, and, as a result, their records were poor. They were capable of doing better college work, but to them other considerations were more important.

The students who were entirely self-supporting, therefore, usually had a highly favorable attitude toward college work, but they were sometimes maladjusted, and a few did not have the proper attitude toward intellectual endeavors. In other words, the fact of

self-support had different meanings for different students. As a result, it did not by itself constitute a reliable criterion of success or failure in college work. The relation between self-support and success in college varied with the nature, extent, and purpose of the remunerative occupation and with the characteristics of the individual. Although the relation is important, all the conditions should be discovered and analyzed for the individual student if the fact of self-support is to be employed effectively in selective admission.

In applying for admission to the University of Chicago, the members of the class under consideration were required to supply information relative to the nationality, occupation, and education of their parents. Although this information is sometimes assumed to have some bearing on the fitness of the applicant to undertake college work, its exact value in selective admission has been uncertain. A statistical study of the class showed that neither the nationality nor the occupation of the father was closely related to the student's success in college. The study did show, however, that the students whose fathers were college graduates succeeded in the university more frequently than did the students whose fathers were not college graduates. Consequently, the facts for a number of students were analyzed in order to determine the advantages which the sons and daughters of college graduates had in undertaking higher education.

The study revealed three important facts. First, the college-bred father usually took active steps to prepare his son or daughter for higher education. Very early in the student's life, plans were made for his entire schooling, so that he looked forward to college for many years before he actually entered on higher education. Consequently, he built up a basis of ambitions and hopes, which later he attempted to realize. The father also assisted the child in laying a good foundation in his elementary- and secondary-school work by compelling him to study, teaching him how to study, urging him on to greater achievement, aiding him with difficulties, and verifying his preparation of lessons and his mastery of school work. Second, the student whose father was a college graduate usually had come to realize the value of a higher education. The direct connection between the education and the occupation of his father and the contrast between the social and economic positions of men who were college graduates and of men who were not college graduates made the student realize,

with or without the help of his father, the importance of securing a college education. Furthermore, he looked on failure as a disgrace both to himself and to his parents. Third, the influences exerted by the college-bred father and by the general home environment were such as to develop genuine intellectual interests in the student. The contacts with a library in the home and with the father's occupational activities were particularly strong in arousing interest in intellectual pursuits. Of all the men students in the class whose fathers were college graduates, 62 per cent planned to enter their fathers' occupations in contrast with 18 per cent in the case of those whose fathers were not college graduates.

The favorable influences which college graduates exert on their children are, of course, not necessarily present in every home established by a college graduate; nor are all these influences lacking in the home of a non-graduate. Consequently, their presence or absence in any particular case can be determined only by an analytical study of the facts concerning the individual under consideration. After the necessary facts have been obtained, they may be used to advantage in anticipating success or failure in college work.

The discussion up to this point has been concerned with the effectiveness of various requirements which are enforced, or might be enforced, in admitting students to institutions of higher learning. No method, or combination of methods, which may be employed at the present time, however, can give an accurate forecast of the success or failure which all the members of a given group will experience in college work. Consequently, it is impossible to select from several hundred applicants for admission to college all who will be unsuccessful. Many cases of failure cannot be discovered until the students have actually undertaken work of college grade. Because of this fact, institutions which practice selective admission frequently have a policy of selective retention. They employ the records which students make during their first quarter or first semester to determine the students who shall be permitted and the students who shall not be permitted to continue the pursuit of college work. Under such conditions it is important to know how accurately a student's ultimate success or failure can be predicted on the basis of his record for the first quarter or for the first semester.

The average marks made by the students in the class under

consideration during their first quarter in the university were compared with their average marks during all or part of the two-year period. The comparison involved, of course, only those students who, under the existing regulations, were permitted to continue in the university on the basis of their records for the first quarter. The study showed that in most cases the averages for the first quarter constituted a very accurate indication of success or failure during the longer period. The students who made low averages during the first quarter usually continued to make low averages. Some students whose records for the first quarter were poor had only one chance in thirty for ultimate success. The mathematical relation between the two variables is further indicated by the coefficient of correlation, which was found to be $.810 \pm .016$. The study showed that the standards which the University of Chicago employed in determining the retention of students at the end of their first quarter of residence might well be raised. Many students who were almost certainly doomed to failure in college were permitted to continue beyond the first quarter under the existing regulations. If higher standards had been employed, a fairly large number of students who had failing averages for the two-year period and a very small number of students who ultimately succeeded would have been eliminated.

In conclusion, it may be stated that any method of selecting or retaining college students will result either in denying the opportunity to pursue a higher education to some individuals who could succeed or in presenting such an opportunity to some who will fail. Although the effectiveness of some methods is greater than that of others, the effectiveness of the method or methods is not the only factor to be considered. The convenience and the economy of administration will determine to a considerable extent the particular methods which are employed. Certain devices which are capable of discriminating between successful and failing students are too intricate or too expensive to use, while other devices which make much poorer distinctions are utilized because they do not possess the disadvantage of intricacy or great expense.

THE HIGH-SCHOOL PARENT-TEACHER ASSOCIATION

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A SPECIAL PROBLEM

The high-school parent-teacher association presents a special problem. In the first place, the parent-teacher association has not been established in the high school so long as it has been in the elementary school. Consequently, there is not as much experience available to assist in organization and administration. The association in the elementary school is a more intimate association than the one in the high school. The parents as a group are younger and are less occupied with other affairs. The children in the elementary school are younger and apparently more in need of attention and of interest. It frequently happens also that parents give so much time and attention to the parent-teacher association in the elementary school that their interest is exhausted or nearly so by the time their children reach the high school. Furthermore, parents, as a rule, look on the high school as a more distant institution than the elementary school. They seem somewhat more reluctant to participate in high-school affairs than to participate in the affairs of the elementary school. In part, of course, this attitude of parents is due to the aloofness of high-school administrators. The men and the women in high-school executive positions have not been so ready to encourage the formation of parent-teacher associations as have the administrators of the elementary schools.

The conditions in the high schools ought completely to convince thoughtful observers that, if there is any difference at all between the needs of the elementary school and the needs of the high school, it could be shown that the greater need for the full co-operation of parents and teachers is in the high school. The parent-teacher association can be of the utmost assistance in the solution of some of the most pressing high-school problems.

A CHANGED ATTITUDE

If the high-school parent-teacher association is to be of the greatest service, it is necessary to have a radical change in the attitude of both parents and school administrators. Parents need to keep fresh and active their interest in the welfare of high-school children; high-school administrators, in turn, need to consult parents more frequently, and they need to seek the organized assistance of parents in meeting the problems which necessarily arise in the education of adolescents.

SOME NECESSARY FUNDAMENTAL AGREEMENTS

For the successful functioning of a high-school parent-teacher association, it is necessary that parents and school administrators reach some fundamental agreements. The first of these is that parents and school administrators have an equal, though perhaps a differentiated, interest in the welfare of the children. Parents have, of course, a direct personal interest. While school administrators do not have the immediate personal interest of parents in individual children, they have concern for the welfare of all children under their care, and they have also for the group as a whole a civic interest, which parents are not expected to feel to the same degree.

Another fundamental agreement is that parents and administrators shall be equally free to make suggestions to each other without embarrassment. It is not difficult to achieve this freedom if personal interest and professional pride are laid aside in the interest of a common objective. If suggestions cannot be made freely, certain reserves are set up, out of which come misunderstandings and accusations.

It should be understood, however, that final decisions on purely educational matters are to be made by the school authorities and that final decisions on purely personal matters, such as dress, diet, and home habits, are to be made by the parents. Wherever there is doubt concerning the nature of the decision to be made, the decision should be reached in conference. There are likely to be many cases where the personal and the educational interests closely impinge on each other. A friendly spirit of co-operation makes it possible to reach decisions without embarrassment or personal pique.

No parent-teacher association can expect to do its work well unless parents definitely agree to engage in no political activity against school administrators without first having a frank and open discussion with the administrators concerning the policies with which they disagree. This fundamental understanding does not imply that parents who are members of a parent-teacher association shall be obligated always to support policies with which they are not in sympathy. On the contrary, it is sometimes necessary for parents vigorously to oppose school administration when that administration is inefficient, or mistaken, or venal. No opposition of this kind, however, should ever be organized in secret or without prior discussion with school authorities. It is only by means of an agreement of this type that a parent-teacher association can expect to have the largest field of usefulness.

Finally, there should be a fundamental agreement that all policies of the high-school parent-teacher association are to be determined by parents and school authorities jointly. For the effectual carrying-out of this agreement, it is necessary that parents, teachers, and administrators share jointly in the work of all committees and in the formulation of all programs. It is especially important that speakers who are to address the association shall be acceptable to both the parents and the school authorities.

SOME CRITICISMS

The critics of the high-school parent-teacher association level their shafts at both the parents and the teachers. High-school teachers are represented as assuming the airs and the attitudes of college teachers. They are supposed to be more interested in the subjects which they teach than in the boys and girls. The departmental organization in the high school has a tendency to create a certain aloofness on the part of teachers because they have so many pupils to deal with that they cannot know all of them intimately; nor can they know the parents. The parents, on the other hand, are sometimes accused of regarding the parent-teacher association as merely a social club of a somewhat aristocratic and exclusive nature. Sometimes the principal thinks that the association is merely a powerful agency for the control of school administrative policies. If these criticisms were

just, they would constitute a heavy indictment against the association. It is not believed, however, that the charges referred to are more than sporadic. For that reason they may be regarded as warnings rather than as well-sustained adverse arguments.

PROBLEMS AND ACTIVITIES

Experience has shown that the problems of adolescence are among the most difficult problems with which the parents and the school have to deal. These problems may well be the basis of the activities in which a high-school parent-teacher association engages.

Educational and vocational guidance.—Throughout the high-school years thoughtful pupils are perplexed with problems relating to the continuance of their education and to their choice of vocation. Many pupils leave school at this time and drift into blind-alley jobs. Many others make wrong choices based on inadequate knowledge of their own capacities and on misinformation concerning subjects of study or possible vocations.

Discipline.—The aims of discipline are self-mastery and self-control. In the high-school years pupils are passing out of a period in which external discipline is imposed into a period where they must assume full responsibility for themselves. The period of transition is always difficult. How to make the transition easy, natural, and wholesome is a problem which may well engage the attention of parents and teachers.

Relation of the sexes.—The problems which grow out of sex assume great importance during adolescence. These problems are conspicuous in the high schools, which for the most part are coeducational. The problems of dress, of parties, of late hours, and of the use of automobiles are all intimately, though not exclusively, involved in sex relations.

Problem cases.—Adjustment to material and social environment is one of the most difficult of tasks even for adults. Some adolescents find adjustment exceedingly difficult. These become the problem cases which do not yield to the ordinary methods of discipline or correction. They require close and sympathetic study of long duration. If proper attention is given to these cases of maladjustment, the children may be directed into lines of usefulness and happiness.

Otherwise, these problem cases become the wrecks of life. They furnish the delinquent and the criminal cases, or they fill the asylums for the insane.

Mental hygiene.—Not enough is known about the normal functioning of the human mind. When we talk about health, we usually mean physical health, ignoring the fact that mental health is of equal importance. The characteristics of modern civilization are such as to make it easy for the mind to become unbalanced and upset. There is greater need than ever before for understanding and applying the principles of mental health.

Home study.—Parents and teachers very properly may co-operate in determining the amount of home study which is to be assigned. Teachers are expected to know how much home study is necessary. Parents, on the other hand, know how much studying their children can do without detriment to their health. Somewhere between no home study at all and so much required home study that pupils are obliged to work until late at night in order to accomplish the required tasks lies the middle ground much to be desired. This is a matter which cannot take care of itself automatically. It requires the attention and co-operation of parents and teachers.

Honors and prizes.—In an effort to stimulate and to reward scholarship friends of the schools sometimes offer honors and prizes, which frequently do as much harm as good. There can be no doubt that scholarship needs stimulation. Whether honors and prizes as incentives to scholarship are justifiable is an open question. Much investigation and much thinking need to be done before a final conclusion concerning the proper methods of rewarding merit can be reached.

SUPPORT OF THE SCHOOLS

Money-raising events.—In some communities, because of financial limitations or public criticism, it is difficult for the board of education to furnish highly desirable equipment and supplies. Sometimes very necessary equipment would be lacking if the parent-teacher association did not provide it. It is entirely justifiable for such an association to meet needs of this kind. It is important, however, that the association should not permit its money-raising activities to assume disproportionate importance. Nor should it ever be necessary for a

school administrator to induce a parent-teacher association to engage in money-raising activities in order to keep the members of the association occupied.

It should be remembered also that financial transactions are prolific sources of trouble. If funds are raised by a parent-teacher association, there should be a clear understanding in advance concerning the use of the funds and concerning the financial officer who is to disburse them. Whether the school or the association actually conducts the financial transactions is not of so much importance as that in either instance there should be a strict accounting for all funds.

Community publicity.—One of the most useful ways in which a parent-teacher association may help the schools is first to keep informed concerning their purposes and then to give publicity to these purposes throughout the community. The payment of taxes is always a disagreeable task. People reluctantly give their money to the state. This is a natural situation and must be reckoned with. To secure money for the support of the schools apparently will meet with increasing difficulty. The passing of bond issues for the purchase of school sites and for the construction and equipment of school buildings and the passing of tax levies for the operation and maintenance of schools will require that the public shall be definitely informed concerning the purposes and the needs of the schools and their methods of administration. It is doubtful whether any other organization can give more effective aid than can the parent-teacher association in furnishing the legitimate publicity necessary for securing public support for the schools.

The organization of parent-teacher associations constitutes one of the most promising movements in American education. The home has given up too many of its obligations. The school has undertaken to do more than it can do alone. When the home and the school agree to support each other and when they agree that each shall operate without hindrance in its own sphere of action, the educational system of America will profit greatly.

SUPERVISION FROM THE STANDPOINT OF THE SUPERVISED

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From the standpoint of the school principal, no subject has received so much emphasis during the past few years as has supervision. The emphasis on supervision is a result of the recognition of the fact that the principal is more than a clerical worker or study-hall supervisor; he is the professional leader of the school. The educational press and speakers at all educational meetings of importance have proposed modern methods and devices for worth-while supervision, and principals have been told and at least partly convinced that their biggest job is the improvement of instruction.

Is it not pertinent, however, to ask whether very much has been done to determine the reactions of the supervised themselves and to weigh results in terms of those to be benefited? Is the beginning teacher actually being helped in her development? Is the average teacher receiving the constructive aid that will serve to make her a good teacher and the good teacher in turn a superior teacher?

With these questions in mind, the study here reported was made. The data, coming first hand from teachers in Michigan without fear of examination or censorship by their superiors, seem a fair indication of the practices in that state.

It must be stated at the outset that the study deals with supervision only from the standpoint of classroom visitation by the supervisor and the subsequent reports to the teachers or conferences with them. It is granted, of course, that this phase of supervision represents only a part of the supervisory program, and some administrators will argue that it is only a small part, but to the writer it is of sufficient importance to justify careful consideration. How a supervisor can hope to improve instruction unless he knows definitely by actual observation the kind of instruction being given is a question of considerable importance.

The writer's interest in the subject of supervision was first aroused some fifteen years ago when he made his first attempt at teaching in a rural school. During the year he was visited once by

the county school commissioner, the length of the visit approximating thirty minutes. Happily, things are changing in the rural districts but not rapidly enough in most places. Countless beginning teachers take up their work hardly knowing the duties of a teacher.

Interest in supervision continued as the writer entered the field of high-school teaching. The superintendent visited the school two or three times during the year, but his observations were kept strictly to himself.

When the writer became a high-school principal, the subject assumed far greater importance and took on a new aspect, for the principal is the doer, ever on the alert to supervise and help a willing or an unwilling faculty.

Questionnaires were sent to the principals of twenty-two high schools in Michigan in October, 1928, with the request that they be submitted to ten representative teachers in each school. It was specifically stated that the answers would not be examined or censored by the principals. Replies were received from fifteen of the twenty-two schools as follows: Ann Arbor, Birmingham, Detroit (Northwestern High School), Ferndale, Grosse Pointe, Highland Park, Ishpeming, Monroe, Mount Clemens, Muskegon, Petoskey, Port Huron, Royal Oak, Saginaw, and Three Rivers.

There was an average of thirty-three teachers in these schools, not including Highland Park, with 154 teachers, and Detroit (Northwestern High School), with 149 teachers. The total number of replies received was 142.

The questions included in the questionnaire and a summary of the replies to each question are as follows:

1. How many times were you visited by your principal last year for the purpose of supervision? Total number of visits, 310. Average number of visits per teacher, 2.1.
2. Approximately the total time in clock hours? Total number of hours, 135. Average number of minutes per visit, 26.
3. How many times were you visited by your superintendent for the purpose of supervision? Total number of visits, 116. Average number of visits per teacher, 0.8.
4. Approximately the total time in clock hours? Total number of hours, 58. Average number of minutes per visit, 30.
5. How many times were you visited by your supervisor or de-

partment head for the purpose of supervision? Total number of visits, 88. Average number of visits per teacher, 0.6.

6. Approximately the total time in clock hours? Total number of hours, 34. Average number of minutes per visit, 23.

7. In your judgment, what was the primary aim on the part of the supervisor (meaning the superintendent, principal, special supervisor, or department head)? Check one: (a) To secure a rating of you as a teacher. (b) To improve instruction. (c) "Just to visit your class." Seventy-nine teachers checked Item *a*; thirty-eight, Item *b*; and thirty, Item *c*. A number of teachers checked two of the items.

8. Using the total number of visits from principal, superintendent, supervisor, and department head as a basis, in how many cases did the supervisor teach the class for you? Total number of visits, 514. Total number of times classes were taught, 14, or 2.7 per cent.

9. In how many cases were written reports made to you after the visitations? Total number of written reports, 35, or 6.8 per cent.

10. In how many cases were personal conferences held with the supervisor after the visitations? Total number of personal conferences, 140, or 27.2 per cent.

11. As a rule, were the criticisms offered constructive or adverse? Number of teachers reporting constructive criticisms, 60. Number of teachers reporting adverse criticisms, 6.

12. Will you answer frankly—did the supervision which you received last year make you a better teacher? Number of affirmative replies, 53. Number of negative replies, 51.

13. Do you welcome supervision? Number of affirmative replies, 74. Number of negative replies, 23.

14. Do you ask for supervision? Number of affirmative replies, 72. Number of negative replies, 26.

At the end of the questionnaire, the teachers were asked to list the faults of supervisors and supervision as they had encountered them and to make suggestions for improvement. Obviously, it would be impossible to report all the faults and suggestions listed, but those follow which were listed by at least 25 per cent of the teachers.

FAULTS OF SUPERVISORS AND SUPERVISION

1. The visits are too infrequent to give the supervisor a fair basis of judgment of the teachers' work.

2. Principals and superintendents are skilled in only a few of the subjects which they attempt to supervise.
3. Supervisors are hesitant about offering definite and constructive help for the improvement of teaching.
4. Supervisors assume an attitude of looking for something on which to rate the teacher rather than an attitude of helping him to be a better teacher.

SUGGESTIONS FOR IMPROVEMENT

1. More frequent visits.
2. More helpful criticism either by written report or by personal conference after visitation.
3. The supervisor should enter the classroom and stay through the entire period.
4. The supervisor should visit a class a number of times on consecutive days.

CONCLUSIONS

1. It would appear that supervision from the standpoint of visitation is not being carried on extensively in the high schools in Michigan.
2. There seems to be a decided feeling among the teachers reporting that supervisory visits followed by reports or conferences are desirable and helpful.
3. A successful supervisor will impress teachers with the fact that his primary aim is to improve instruction rather than to visit classes or secure ratings.
4. Every teacher has a right to know how the administration reacts to his work.
5. The replies to Question 12 are of considerable significance. The fact that only 53 of the 104 teachers replying feel that they are being helped in their work is a severe indictment of the supervisory program.
6. In high schools of moderate size the principal is the logical supervisor of teaching. If he realizes the importance of supervision, he will find time for it by making it a part of his daily schedule.
7. It would seem that principals as the professional leaders of their schools might give more earnest consideration to the improvement of teaching through supervision.

VALUE OF ENGLISH MARKS IN PREDICTING FOREIGN-LANGUAGE ACHIEVEMENT

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Judging from the common practice of guiding and grouping pupils in the foreign languages on the basis of ability in English,¹ one would be inclined to believe that there is a close relation between achievement in English and achievement in foreign language. Actual inquiry, however, shows that very little objective proof of the existence of a substantial correlation has been presented. It is true that recent studies of a large number of high-school and college students tend to show that foreign-language work improves ability in the mother-tongue,² but no one seems to have investigated the actual degree of relationship between previous achievement in English and subsequent performance in foreign-language courses. Even if it is certain that pupils who have studied a foreign language do better in English than do those who have not studied a foreign language, it is probable that the superiority may be attributable, at least in part, to greater original ability in English. May not a possible superiority in language interest, manifesting itself, perhaps, in a higher level of achievement in the mother-tongue, have something to do with pupil choice of foreign-language work in the beginning?

¹ "Foreign Languages in the Junior High School," *California Quarterly of Secondary Education*, II (June, 1927), 366-68. Also in *Modern Languages Forum*, XII (October, 1927), 13-18.

² a) Oscar H. Werner, "Influence of the Study of Modern Foreign Languages on the Development of Abilities in English," *Modern Language Journal*, XII (January, 1928), 241-60.

b) Louis H. Limper, "The Effect of Having Studied a Foreign Language in High School on the Ability of College Freshmen To Use English Correctly," *School Review*, XXXV (November, 1927), 676-80.

c) See also Daniel Starch, "Some Experimental Data on the Value of Studying Foreign Languages," *School Review*, XXIII (December, 1915), 697-703; and Daniel Starch, "Further Experimental Data on the Value of Studying Foreign Languages," *School Review*, XXV (April, 1917), 243-48.

The evidence here presented is not intended to substantiate either side of the question. The findings are offered merely because of their interest and their immediate pertinence to the general problem of foreign-language prognosis. The reader can draw his own conclusions with respect to the question which has been raised.

The data consist of the average end-semester marks in English, for two terms, of 109 beginners in Spanish in the Woodrow Wilson Junior High School and the San Diego Senior High School, San Diego, California, and the average mid-semester and end-semester marks received by the same pupils in the first term of foreign-language work. For the purposes of statistical treatment, all marks were translated into point scores on the basis of their standard-deviation distances on the linear scale of the normal-frequency curve. It will be noted that by comparing achievement in Spanish with ability in English during the two preceding semesters, the possibility of an interactional influence is largely eliminated. The reason for restricting the marks in Spanish to one semester was primarily to eliminate the effect which ability acquired in the language itself might have on the quality of performance in the later stages.

Table I presents the measures of central tendency and variability for the distributions of the teachers' marks in both Spanish and English. It is interesting to note the appreciably inferior achievement of the boys in both subjects. This difference is in direct accord with the results of all previous investigations of sex differences in interests and abilities in school subjects.¹ In a study of a large number of high-school Seniors, Colvin and MacPhail,² for example, found that the foreign languages are among the subjects liked least by the boys and among the subjects liked best by the girls. Attention is also called to the relatively greater variability of achievement for both boys and girls in Spanish than in English and to the more variable achievement of the girls in the study of their mother-tongue.

¹ a) Edward Andrews Lincoln, *Sex Differences in the Growth of American School Children*, pp. 83-88, 103-4. Baltimore: Warwick & York, Inc., 1927.

b) Daniel Starch, *Educational Psychology*, pp. 75-80. New York: Macmillan Co., 1927 (revised).

c) Walter Kaulfers, "Prognostic Value of the I.Q. in Spanish," chap. v. Unpublished Master's thesis, Stanford University, 1928.

² Stephen S. Colvin and Andrew H. MacPhail, *Intelligence of Seniors in the High Schools of Massachusetts*, p. 27. Bureau of Education Bulletin No. 9, 1924.

Table II presents a statistical comparison of the point scores of the same pupils in English and Spanish. Forty-three per cent of the boys and 33 per cent of the girls made higher point scores in English

TABLE I
MEASURES OF CENTRAL TENDENCY AND VARIABILITY OF POINT SCORES IN SPANISH AND ENGLISH

MEASURE	BOYS		GIRLS	
	Spanish	English	Spanish	English
Number of cases.....	54	54	55	55
Range.....	10.000	9.000	10.000	10.000
Mean.....	5.963	6.937	7.500	6.936
Probable error of mean.....	.201	.139	.242	.220
Pearson coefficient of variation.....	36.609	25.029	35.413	34.862
First decile.....	3.688	4.301	4.310	4.150
First quartile.....	4.440	4.892	5.550	4.975
Median.....	6.000	6.000	7.300	6.767
Third quartile.....	6.830	6.900	8.930	8.200
Ninth decile.....	8.766	8.120	11.450	10.875
Range between first and ninth deciles.....	5.078	3.819	7.140	6.725
Quartile deviation.....	1.195	1.004	1.190	1.613
Standard deviation.....	2.183	1.511	2.656	2.418

than in Spanish. Thirty-one per cent of the boys and 47 per cent of the girls made lower point scores in English than in Spanish. Twenty-six per cent of the boys and 20 per cent of the girls made the same

TABLE II
COMPARISON OF POINT SCORES IN ENGLISH WITH POINT SCORES OF THE SAME PUPILS IN SPANISH

	BOYS		GIRLS		TOTAL	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
Point scores same in English and Spanish.....	14	26	11	20	25	23
Point scores higher in English.....	23	43	18	33	41	38
Point scores lower in English.....	17	31	26	47	43	39
Total.....	54	100	55	100	109	100

point scores in the two subjects. Thus, it seems that, while the boys tend to achieve on a lower level in Spanish than in English, the girls for the most part do better in Spanish than in English. These obser-

vations should be kept in mind in determining the prognostic value of the correlations presented, since, in making predictions from past performance, it is important to know whether an individual is likely to achieve on a higher or lower level in his prospective work than in his previous work.

The coefficients .509 and .578 shown in Table III would yield valid predictions for approximately fifty-seven out of every one hundred boys and for at least fifty-nine out of every one hundred girls. Prognoses based on these measures would be 13.9 per cent and 18.4 per cent better than random guesses in the case of boys and girls,

TABLE III
MEASURES OF RELATION BETWEEN POINT SCORES IN SPANISH
AND POINT SCORES IN ENGLISH

Measure	Boys	Girls
Number of cases.....	54	55
Pearson coefficient of correlation.....	.509	.578
Probable error of coefficient of correlation.....	± .068	± .061
Coefficient of alienation.....	.861	.816

respectively. Compared with the coefficients obtained by the writer and other investigators in previous studies, the coefficients indicate that teachers' estimates of pupil achievement in English are more accurate measures of probable success in foreign language than are intelligence quotients,¹ end-semester marks in general language,² and scores on standardized foreign-language aptitude tests.³ The superior prognostic value of English marks as compared with intelligence quotients is possibly to be explained by the fact that there are more elements common to Spanish and English than to the subject matter of mental tests and foreign-language courses. To some extent the superior prognostic value of English marks may be attributed also to the fact that marks in English as estimates of past achievement provide indirectly an indication not only of ability to learn but also

¹ Walter Kaulfers, *op. cit.*, chap. x.

² Walter Kaulfers, "The Prognostic Value of General Language," *School and Society*, XXVIII (November 24, 1928), 662-64.

³ J. N. Jordan, "Prognosis in Foreign Language in Secondary Schools," *School Review*, XXXIII (September, 1925), 541-46.

of habits of application. Thus, marks in English afford doubly secure bases for prediction, since industry and persistence are undoubtedly as essential to success in foreign-language work as is the capacity to learn itself.¹ The relative inferiority of general-language marks for prognostic purposes is probably due to the fact that the exploratory courses are conducted all too frequently on the play level, with the result that the measures of achievement do not always provide safe guaranties that the pupils will have the same degree of success when they are transferred to the serious work-schedule of regular foreign-language classes. The low prognostic value of scores on standardized aptitude tests is probably attributable to deficiencies in the tests themselves.

Whatever the explanation, the findings seem to show that marks in English are at the present time the best single basis for predicting probable achievement in foreign-language work. Indeed, when the unreliability of teachers' marks is considered, the correlations here reported are significantly high, closely approximating the standard of perfect correlation proposed by some statisticians for data of this type. These conclusions, however, must obviously be considered in connection with the number of cases on which they are based. It is important to note that the sampling of ability here involved is as large as that on which the measures of the reliability and validity of certain widely used prognostic tests for foreign language are apparently based.² This circumstance and the fact that the correlations between teachers' marks and scores on the aptitude tests are for the most part lower than the correlations reported in this study occasion the statement that the predictive value of the prognostic tests must be considerably increased before their use in educational guidance can be justified. There is no need of incurring the expense in time, effort, and money involved in the purchase and administration of

¹ Walter Kaulfers, "Prognostic Value of the I.Q. in Spanish," pp. 95-98, 215-20. Unpublished Master's thesis, Stanford University, 1928.

² a) George Dinsmore Stoddard, *Iowa Placement Examinations*, p. 77. University of Iowa Studies in Education, Volume III, Number 2. Iowa City, Iowa: State University of Iowa, 1925.

b) J. N. Jordan, *op. cit.*

c) G. M. Ruch and George D. Stoddard, *Tests and Measurements in High School Instruction*, p. 164. Yonkers-on-Hudson, New York: World Book Co., 1927.

tests, nor of running the risk of their misuse by untrained teachers, when such easily obtained and readily understood measures as English marks provide equally accurate, and even more certain, indexes of probable success. Indeed, in the light of recent investigations, the existence of a so-called "linguistic aptitude" or "language talent" apart from general intelligence is exceedingly doubtful.¹ The very theory of prognostic testing in foreign language, presupposing as it does the prevalence of such an element, rests, in consequence, on a very uncertain foundation.

Possibly the most necessary qualifying statement is that the correlations between English marks and foreign-language marks, though higher than the correlations in the case of practically all other prognostic measures, by no means assure infallible predictions. English marks can be used with safety only in classifying pupils into roughly homogeneous groups. When the guidance of individual pupils is involved, the adviser will do well to consider in addition such factors as general intelligence, language interest, and habits of application and to remember that a girl will probably do better in Spanish than in English and that a boy will probably do less well. Finally, whether the aim of prognosis is classification of pupils into ability groups or the guidance of individual pupils with respect to their choice or avoidance of foreign-language work, ability in English, if considered at all, should, in view of the unreliability of teachers' marks, be measured by averaging the pupils' end-semester marks for at least two terms of study, and the averages obtained should be considered in connection with scores on objective standardized tests of achievement in English grammar, composition, and language usage. In no case should a single mark awarded by a single teacher be permitted to determine a pupil's choice of subjects.

¹ John W. Todd, "Is There a Language Talent?" *Modern Languages Forum*, XIII (April, 1928), 7-10.

Educational Writings

REVIEWS AND BOOK NOTES

Departmental supervision in secondary schools.—Evidences of the current interest in educational supervision are found in the rapid growth of the National Conference of Supervisors and Directors of Instruction and in its yearbooks on supervision and its journal, *Educational Method*. The Eighth Yearbook of the Department of Superintendence will be devoted to problems of supervision. The Appleton Series in Supervision and Teaching, to which *The Supervision of Secondary Subjects*¹ belongs, now includes seven completed or projected books.

Professor Uhl, as editor, employed two plans to promote unity and coherence of the discussions prepared by the various special-methods and supervisory experts. Before the writing was begun, an outline of the topics which should be discussed was placed in the hands of each contributor, and, in such matters as topical arrangement, punctuation, and footnotes, the usual editorial work was done after the completion of the manuscripts. Most of the chapters follow a plan of organization which involves consideration of the nature of supervision in the field discussed, objectives, selection and organization of content or subject matter, methods of teaching, measurement and diagnostic and remedial work, teacher-training and improvement of teachers, and current literature.

In addition to his work as editor, Professor Uhl prepared an introductory discussion of the scope of departmental supervision and a closing statement of the co-operative character of departmental supervision. The authors who have treated supervision in the various school subjects and the institutions or organizations represented are as follows: Pieper, of New York University, science; Clark, of Teachers College, Columbia University, mathematics; Gray, late of the Rochester schools, Latin; Cole, of the University of North Dakota, modern foreign languages and literature; Leonard, of the University of Wisconsin, English; Hill, of the University of Chicago, social studies; Blackstone, of the University of Iowa, commercial education; Dodge and Henderson, of the University of Wisconsin, home economics; Edgerton, of the University of Wisconsin, industrial subjects; Bradish, of the New York Metropolitan Museum of Art, art; Gordon, of the University of Wisconsin, music; Perrin, of the American

¹ *The Supervision of Secondary Subjects*. Edited by Willis L. Uhl. New York: D. Appleton & Co., 1929. Pp. xvi+674.

Child Health Association, the health program; and Logasa, of the University High School, University of Chicago, library service.

Many experiments, investigations, and authoritative analyses are cited in footnotes and chapter bibliographies. The chapters dealing with natural science, modern languages, and English are especially thorough in reviewing important literature in the fields represented. In its extensive utilization of the results of experimental and factual studies, the book differs somewhat from two earlier books in the same series. *Visiting the Teacher at Work* (1925) by Anderson, Barr, and Bush consists largely of descriptive and analytical material drawn from the classroom and actual teaching situations: lesson plans, analyses of teaching, case studies of teaching, stenographic reports of lessons observed and of supervisory conferences, case studies of failures, problems in the criticism of teaching, and numerous summary outlines for the guidance of the supervisor. *The Organization of Supervision* (1928) by Ayer and Barr includes a good statement of typical organizations and present practices in supervision as found in large city systems. In the large amount of educational literature summarized by Ayer and Barr it appears that, with the exception of the experimental method, the major techniques of investigation in education are reasonably well represented: philosophical, historical, survey, questionnaire, statistical, case study, and activity analysis. In *The Supervision of Secondary Subjects* it is encouraging to find summarized a considerable body of experimental evidence concerning desirable supervisory and teaching procedures.

Supervisors, principals, superintendents, and teachers as well as classes in supervision and special methods will find the book profitable reading. As the editor suggests, the chapters may be read separately without reference to preceding or subsequent chapters and used as a basis for discussion in conferences and staff meetings.

CARTER V. GOOD

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A study of social conditions in the United States.—Authors of textbooks in history and the other social studies have with few exceptions been dominated by a "cover-the-ground" attitude. Eager to provide material on all aspects of a given field, the writers have too often produced books that are encyclopedic in character, books that contain everything and nothing, devoting a few paragraphs to this topic and a few sentences to that and presenting no topic adequately. As a result, pupils have been provided with masses of generalizations, frequently uninteresting and unintelligible and, what is more unfortunate, usually indigestible and uneducative in character.

A book¹ singularly and refreshingly free from the defect explained in the preceding paragraph has made its appearance. The authors, instead of attempting to treat all the problems of present-day society, have wisely limited their

¹ Seba Eldridge and Carroll D. Clark, *Major Problems of Democracy: A Study of Social Conditions in the United States*. New York: Century Co., 1928. Pp. xvi + 586. \$1.80.

discussion to a relatively small number of topics. In consequence, they have been able to include sufficient illustrative material to make the problems which they discuss interesting and meaningful.

The sharp delimitation of the field has made it possible for the authors to give interesting and significant case histories and descriptions of actual social situations. Their discussion of the family and the home, for example, includes the history of a typical American family through three generations, presented in such a manner as to give a picture of the major social changes through which the American family as an institution has passed since the days of the Revolution. Similarly, working conditions common throughout much of the country are illustrated by a graphic eight-page account of the experiences of a college student who was employed in a number of different factories. In like manner, the practical aspects of local politics are shown by a three-page excerpt from Riordan's *Plunkitt of Tammany Hall* (McClure, Phillips & Co.). The generous use of such illustrative material is a feature of the book which deserves high praise.

The authors divide their book into five parts: "Foundations of Social Life," "Problems of Work and Welfare," "The Business of Living Together," "Problem Individuals," and "Processes of Social Control." Each of the parts is subdivided into a number of chapters. "Foundations of Social Life," for example, embraces chapters entitled "The Family and the Home," "Woman's Place in Social and Economic Life," "Population Problems," and "The Conservation of Natural Resources." Under "Problems of Work and Welfare" are chapters entitled "Problems of Rural Life" (especially well prepared), "The Organization of Business and Industry," "The Wage-Earner and His Problems," "Public Regulation of Labor Conditions," and "The Place of Public Ownership." The last part, which is admirably treated, includes chapters entitled "Science and Art in Social Life" (an unusual contribution), "Education and the Community," "Politics and Public Opinion," "Our System of Government," and "The Making of the Citizen."

The book is designed primarily for high-school Seniors, but, as the authors suggest, it is also a suitable textbook for students in elementary courses in social problems in junior colleges and normal schools. In addition to the concrete and illuminating treatment of a limited number of problems, the book has several other admirable features. Among these should be mentioned (1) the objective explanation of divergent points of view rather than the presentation of solutions of the various problems discussed; (2) the detailed suggestions for field studies, some to be undertaken by individual pupils and some by committees of pupils; (3) the extensiveness of the textbook as compared with the brevity characteristic of similar treatises—the book contains almost six hundred pages; and (4) the ample provision for supplementary reading, the "Course Library" of nine titles being especially commendable.

The authors have made a genuine contribution to the list of textbooks in sociology and social problems. The book deserves high rank in its field.

HOWARD C. HILL

Plumbing equipment for school buildings.—In the erection of school buildings, school administrators come into contact with many technical problems concerning which they are not likely to have accurate information. In many cases they must rely on advertisements and other statements of commercial houses for information concerning the desirable qualities for which they should look in ordering particular items of equipment. In other cases they have no criteria by which to judge the number and types of installations required to meet the needs of their particular situations. A book¹ by M. W. Thomas presents much valuable data concerning the standards and criteria to be used in supplying the school plant with plumbing equipment. The book considers in detail the requirements for the following types of plumbing fixtures or installations for school buildings: water closets, urinals, lavatories, toilet rooms, drinking fountains, sinks, shower baths, swimming pools, and devices for fire protection.

An early chapter sets up a series of criteria for judging plumbing equipment under such headings as simplicity, accessibility, thermostability, non-crazing, durability, non-corrosiveness, non-absorbency, imperviousness, ease of operation, location, number, materials, sizes, light, ventilation, and privacy. Then follows a chapter presenting standards based on these criteria and experimental evidence. Standards are quoted for such items as materials, heights of fixtures, shape or general construction of fixtures, and number of fixtures required. In each case the author quotes the experimental evidence on which the recommendation is based. The data were gathered from such reliable sources as reports of the United States Bureau of Standards and of a committee of the American Hospital Association and from published and unpublished studies by individuals.

Since only a small number of the problems in the field have been subjected to experimental investigation, there remain many questions which need to be answered at least tentatively pending more accurate determination. These the author has attempted to answer by furnishing what he calls "Standards Based on Criteria and Experience." Under this heading are considered such problems as the design, the seat, and the flushing device of water closets; the arrangement of toilet rooms with regard to lighting, ventilation, etc.; and the design and number of drinking fountains and of sinks. The book concludes with a checking list to be used in applying the criteria and with a summary of recommendations, which are arranged in convenient form for ready reference.

The book should prove of considerable value to school administrators and others who do not have the time to make an extensive search for the standards and criteria to be used in selecting plumbing equipment. The number of questions on which experimental data are available appears to be lamentably small, but this condition is not the fault of the author, who merely brings together the results of previous studies. He has performed a real service in distinguishing

¹ Minor Wine Thomas, *Public School Plumbing Equipment*. Teachers College Contributions to Education, No. 282. New York: Teachers College, Columbia University, 1928. Pp. 128.

between the two types of evidence used in solving problems—data which may be truly called experimental and data which are only empirical. Such a division of the material opens up the field for further intensive investigation of the problems which so far have been only tentatively solved. The author has also performed a service in calling attention to the fact that the manufacturers of plumbing equipment apparently have not been sufficiently interested in their school business to make any serious attempt to develop fixtures especially adapted to school conditions. If studies can determine with still greater exactness the standards which must be met and if school administrators can be made conscious of the fact that their needs are not being met as fully and as completely as are the needs of business concerns, there may eventually result a demand on the manufacturers for more adequate service which cannot be ignored.

R. L. C. BURSCH

Deans of women in colleges and universities.—The history of the dean of women in colleges and universities begins as recently as the last decade in the nineteenth century. The number of women employed as deans has increased so rapidly and the duties imposed on them have been so numerous and varied that confusion and indefiniteness have resulted.

With a view to assembling clear and definite information about deans of women and their work, a scientific study¹ of the fields has been made. The methods used in the investigation are (1) the questionnaire, (2) the interview, and (3) time and motion study.

Answers to the following questions have been incomplete and hazy. (1) How many colleges and universities in the United States employ deans of women? (2) What titles are given to the women who perform the duties of a dean of women? (3) How much teaching do the deans do? (4) How much academic training have the deans of women had? (5) Does the training of the deans extend into special fields? (6) What has been their previous experience? (7) What has been the length of service in the position? (8) What is the range of salaries? The author has gained and presented very definite answers to these questions and has drawn some worth-while and illuminating conclusions.

The comprehensive report will be exceedingly helpful to all deans whether they are in college, university, or high school. The last three chapters—"Vocational Guidance for Prospective Deans," "Professional Training for Deans of Women," and "Summary"—are especially well prepared.

The book should be of great interest to educational administrators in all fields.

ELsie M. SMITHIES

Teaching English in New South Wales.—Books on the teaching of English are numerous. Perhaps English claims more books on "special methods" than

¹ Jane Louise Jones, *A Personnel Study of Women Deans in Colleges and Universities*. Teachers College Contributions to Education, No. 326. New York: Teachers College, Columbia University, 1928. Pp. 156.

does any other school subject. That all of them are deserving of commendation, or even of approval, is doubtful. Some have been prepared by arm-chair theorists whose limited schoolroom experience and contacts with pupils render them incompetent as writers on method. Others contain numerous devices and so-called "practical" suggestions based on many years of experience, but too frequently that experience does not provide a satisfactory basis for modern practice. Only a few contain a sound, balanced, working philosophy of English methodology coupled with specific and practical solutions of the numerous problems with which the classroom teacher is confronted, solutions based on experimentation and successful practice by educationists actually at work in the classroom.

A book¹ by an educationist and practicing teacher in New South Wales, Australia, is an attempt to bridge the gap between theory and practice. As its title implies, the book is an account of actual classroom procedures adopted and found successful by a practicing teacher. The author carried out his experimental work while he was in charge of the Department of English at the Boys' High School, Fort Street, Sydney. Since this so-called "experimental" work forms the basis of most of the chapters, the book is hardly suitable for a textbook on methods. The author himself acknowledges that "this book cannot pretend to be a regular textbook of English method. Rather, it is a record of practical and experimental work carried out in the actual classroom, together with suggestions for extended progress along certain proved and established lines. It is then intended to be, in the truest sense, an essay in what, for want of a better term, I have called 'Inspirational Teaching'" (p. viii).

The book contains seventeen chapters, which deal with the teaching of both literature and composition. The contents of the book are suggested by the chapter titles: "The New Movement in the Teaching of English—A Review and Some Suggestions," "Some Problems of the Secondary Teacher of English and Their Solution," "Some Methods of Teaching Composition to Secondary School Pupils," "The Inspirational Essay," "Petty Compositions," "Some Modern Methods of Studying Shakespeare," "The Study of Literary History and Biography," "An Interlude—The Ideas Book," "The Form Lecture System," "Form-Room Plays," "The Study and Teaching of the Novel," "The Magimaps," "The Study and Teaching of the English Essay," "Plays, Play-Making and the Play Day in Schools," "The Teaching of Verse Composition," "A Year's Work in Verse Composition," and "Verse Composition—Some Further Experiments with Secondary School Pupils." In organization, both the book as a whole and the individual chapters lack unity.

Throughout the book one feels that the author is progressive and that he has read widely and has been influenced by the writings on English method in America but that his progressive ideas are frequently checked by the formalism and the traditions of the educational system in which he is working. The public

¹ George Mackaness, *Inspirational Teaching: A Record of Experimental Work in the Teaching of English*. New York: E. P. Dutton & Co., 1928. Pp. xii+226. \$2.70.

examinations appear to interfere with modern views and innovations. The book is paradoxical; for example, in the chapter entitled "The Form Lecturette System" the underlying principles are modern and sound, but they are contradicted by such statements as the following.

At the beginning of the year I stressed the point that these speeches were intended to be exercises in the pronunciation of English and that no error was to be passed unchallenged. We therefore employed the hammer dodge and the rapping of pencils on the desks whenever a mistake was detected. Even in this we noticed marked class individuality. I A practically discarded it, whereas I B became so enthusiastic and critical from its use that nearly every sentence was challenged [p. 105].

In spite of the adverse criticism, the book will be found stimulating, and it deserves reading by American students of methods of teaching English. It should prove to be an exceptionally valuable book to teachers of English in New South Wales.

HAROLD A. ANDERSON

Three French textbooks.—*Premier livre de lecture*¹ is designed for early use in French classes in the junior or senior high school. The author has aimed to arrange his material in such a way that "an early beginning does not have to wait on progress in the grammar" (p. v). The vocabulary includes practically all the words in the first five lessons, including the personal forms of the verbs. The sixth lesson sums up and reviews the previous lessons in the form of a test. The present tense only is used as far as Lesson XIV. The subject matter of a number of the lessons is informational. Thus, the editor reverts to the old style of French reader where information was imparted to the pupil in rather dry, uninteresting paragraphs that did little more than list a series of words with which the author thought the pupil should be familiar. The lessons entitled *À l'école*, *Le maître et la classe*, *La leçon de français*, and *L'examen* come under that heading. They are in no sense reading material and defeat the purpose of reading. The lesson called *Proverbes* seems to fail for the same reason. No pupil will read a list of proverbs for pleasure. The teacher may want the pupil to know the proverbs, but it is a misuse of the term to call such a lesson reading material. There follows, however, material which is good because it is simple and is in story form. There are articles on Pasteur, Jeanne d'Arc, and the French flag, which will appeal to the pupil. There are simplified versions of Daudet's *La dernière classe*, a part of Hugo's story of Gavroche under the title *L'éléphant*, and Coppée's *Les sabots du petit Wolff*. At the end of the book are a few poems and songs, for three of which the music is included. The vocabulary is given with phonetic transcription, which will be found helpful by many teachers. There is also a separate list of the proper nouns that occur in the book with phonetic transcription. Each lesson is followed by a list of questions and a short exercise in grammar.

¹ Winfield S. Barney, *Premier livre de lecture*. New York: D. Appleton & Co., 1928. Pp. x+130. \$0.80.

Certain omissions from the vocabulary were noted: the word *coulis* is not listed separately and is to be found only under *vent*; *singe*, *moutard*, and *soufflet* are not included at all. Some careless proofreading was noticed: on page 62 *écrier* should be reflexive; *noël* meaning a Christmas carol should be written with a small letter; and on page 27 *français* is written *franças*.

Teachers will thank M. de la Fontainerie for making available for class use a little book¹ of charming essays about animals. The book is not a textbook prepared for school use but a group of Théophile Gautier's stories written in the delightful style characteristic of their famous author. The original text of the stories was published in 1869 and has long been out of print. As the stories have never been edited for class use, they make a valuable addition to classroom literature.

The present edition consists of six essays about birds and animals that at one time or another formed a part of Théophile Gautier's household. Gautier tells of the remarkable intelligence of his pets in a way that both interests and charms. In addition, there is real pleasure to be derived from the glimpses that one gets, through and beyond the stories, of the rare soul of one of France's great writers of the Romantic period.

Though the editor calls the French simple, the book will probably be used most advantageously in advanced second-year classes in the high school or even in third-year classes and in college. The edition has been carefully prepared with a complete vocabulary and all the notes necessary for explaining difficult passages. A series of questions on the content is provided for those who may wish to use them as a basis for conversation. At the end of each chapter the editor suggests that the pupil combine the answers to the questions so as to make a continuous narrative. He says that in his own experience he has found this to be a valuable way of teaching free composition.

The work on the book has been skilfully and accurately done.

Premières aventures de Robinson Crusoë has been added to the Cambridge Modern French Series in pursuance of a plan to bring into the schools some of the most notable modern books. The text as it appears is, for the most part, the recent translation of M. Garnier Frères. Such changes as have been made are due to an effort to bring the text a little nearer perhaps to Defoe.

The book belongs to the junior group of the series and is intended, according to the English plan, for pupils between thirteen and fifteen years of age. The extent of the vocabulary and the constructions will probably make it most useful in the second year of the American high school.

The editor has added to the text excellent direct-method lessons and a

¹ Théophile Gautier, *Ménagerie intime*. Edited with notes, questions, and vocabulary by François de la Fontainerie. Newark, New Jersey: Silver, Burdett & Co., 1928. Pp. viii+134.

² Daniel Defoe, *Premières aventures de Robinson Crusoë*. With exercises and a vocabulary by Arthur Wilson-Green. New York: Macmillan Co., 1928. Pp. viii+150. \$1.25.

vocabulary. Each lesson is based on a definite number of pages and is divided into sections as follows: (1) questions on the subject matter, (2) exercises on words and idioms, (3) exercises on grammar, and (4) English phrases to be located in French in the text and memorized. The questions on the subject matter are exceptionally good. They are not of the type that can be answered mechanically by quoting a section of the text. They call for thinking and "some effort of intelligence, some manipulation of the text." The pupil who answers them will certainly have good training in reading for thought content. The questions on words and idioms provide excellent material for widening and enriching the vocabulary through association, comparison, and word formation. The editor seeks in these exercises to make the pupil see the reality and usefulness of the vocabulary. The grammar exercises provide for systematic drill on verbs and pronouns as well as consistent work on the grammar of the pages concerned.

The book was carefully prepared by an editor who understands class needs and has a clear view of what constitutes interesting and effective teaching.

JOSETTE EUGÉNIE SPINK

Reading materials in German.—The third book¹ in a progressive series of German readers aims to present a complete historical picture of the political and cultural development of Germany.

It is generally agreed among modern-language teachers who have accepted the ideas of the reform movement in language-teaching that two factors are necessary for success: (1) a connected and unified textbook containing significant material pertaining to the language that is being taught and (2) an interesting exposition of the social, political, and cultural background of the people speaking that language.

The book by Professors Kaufmann and Balduf has been conceived and executed to meet these two requirements. After giving a brief exposition of the physical, political, and economic geography of Germany, it presents the political and cultural history of the people that inhabit the German-speaking lands.

From the account of the origin of the Teutonic races to the last chapter on the World War and the Treaty of Versailles, the interest of the reader grows steadily as events unfold. One feels that the authors have carefully adhered to the facts as developed by historical research and have presented them objectively. The American reader is especially interested in the clear and convincing exposition of the causes of the Reformation and the World War, and he is in the end compelled to yield unqualified assent.

The language, always idiomatic, is never obscure or beyond the linguistic powers of the students for whom the book is intended. With the accuracy of scientific German, it combines the warmth and imagery of literary style. There are few, if any, treatises on the political and cultural development of Germany

¹ F. W. Kaufmann and E. W. Balduf, *Inductive Readings in German*, Book III. Chicago: University of Chicago Press, 1929. Pp. xiv+232. \$1.50.

that give within as brief a space as lucid and colorful a picture of German civilization.

The book contains well-selected questions on the content of each chapter, an elaborate and helpful vocabulary, and ample notes. Two distinctive features of the book are the fine etchings which illustrate the text and the footnotes which analyze difficult words, especially compounds, and suggest both German synonyms and kindred words in English. The book is bound in such a form that it may be carried easily in the pocket or the hand bag of the student. It is a distinct contribution to the resources already at the command of the teacher of German.

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